UIPlanner Detailed Model User Help

TOC

UIPlanner

Planning

UIPlanner leads the industry with the best solutions for financial planning.

- Share plans across your team by eliminating the need for personal spreadsheets
- Lead your staff towards analytical thinking and away from clerical routines
- Leverage two-sided entry accounting and other pre-built frameworks
- Compare scenarios and analyze drivers that change outcome

Budgeting

UIPlanner provides an integrated cost model, achieving far more than data entry.

- Plan activities and spending consistent with your financial goals
- Balance planned work and your available workforce
- Quickly calculate overheads and depreciation
- Drill from financial plans into spending detail

Regulatory

UIPlanner integrates and streamlines regulatory filings, surpassing the limitations of spreadsheets.

- Shorten the regulatory filing processes and collect revenue increases earlier
- Manage, archive and drill into large data volumes behind regulatory filings
- Reduce errors and clerical processing time
- Increase transparency of calculations to enable quicker learning by new staff

Revenue

UIPlanner's Customer Revenue Module revolutionizes how you calculate and analyze bills.

- Empower analysts to model new rates and rate structures
- Process huge volumes of customer billing data quickly

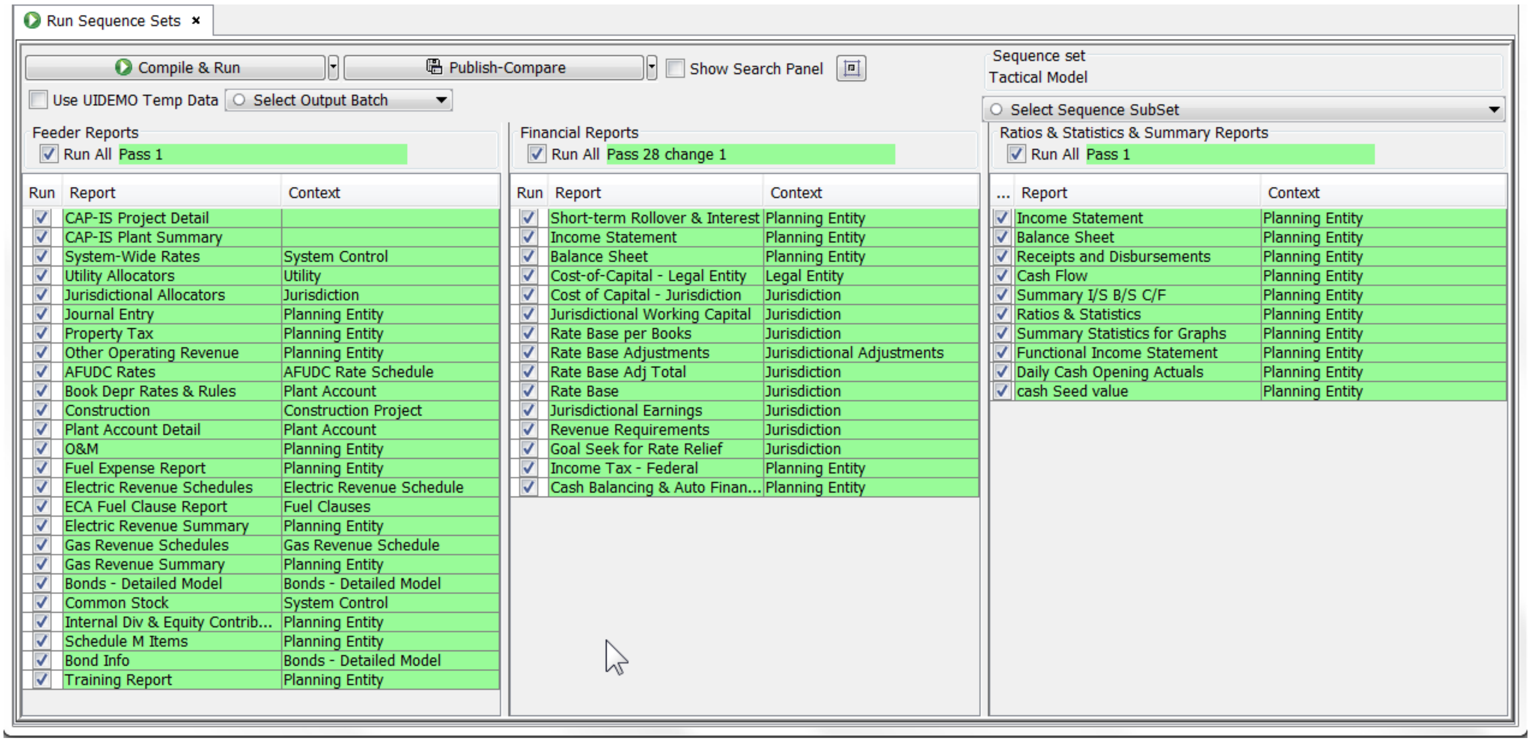
- Improve customer service with bill planning tools
- Implement a new, improved and less costly customer information system

Accounting

UIPlanner provides faster, easier and more transparent processes for:

- Regulatory accounting
- Cost accounting (e.g. overheads and allocations)
- Revenue accounting (e.g. analytics and unbilled revenue)
- Plant and tax accounting

Run Sequence Sets



The Run Sequence Sets screen is the core screen from which users run the Financial Model. The screen lists all of the calculations that make up the Model business logic. The calculations are contained in columns. The column sets and list and order of reports are defined in the Manage Sequence Sets screen.

Model reports run over one or two dimensions – these are indicated in the Context of the report. Reports run top to down in each column, and change color to indicate that they have been run. Once a report is run, its results are available for subsequent reports. Reports in a column can run more than once, or iterate, until the results reach a tolerance. The iterations and tolerance are shown at the top of each column. Once a column reaches its tolerance, the next column runs. Results from one column are available for later columns.

Once all of the reports have been run and columns have reached tolerance, the results are available for viewing in Browse Reports. Model results are available in memory, on the user's machine. In addition to viewing results in Browse Reports, the user can also select from several options for saving the results for later use, or for transferring results to other model scenarios or to published datasets. These are contained as dropdown options on the Publish button.

- Publish Compare – this saves the model results for all reports and all entities. Users can then pull these results up at a later date for scenario compares
- Publish Transfer – this option takes specific model report lines (as set by the calculations) and saves it to text files that can be imported into another model scenario
- Publish Datasets – this option allows users to send model results to published datasets that can be used by multidimensional rule sets

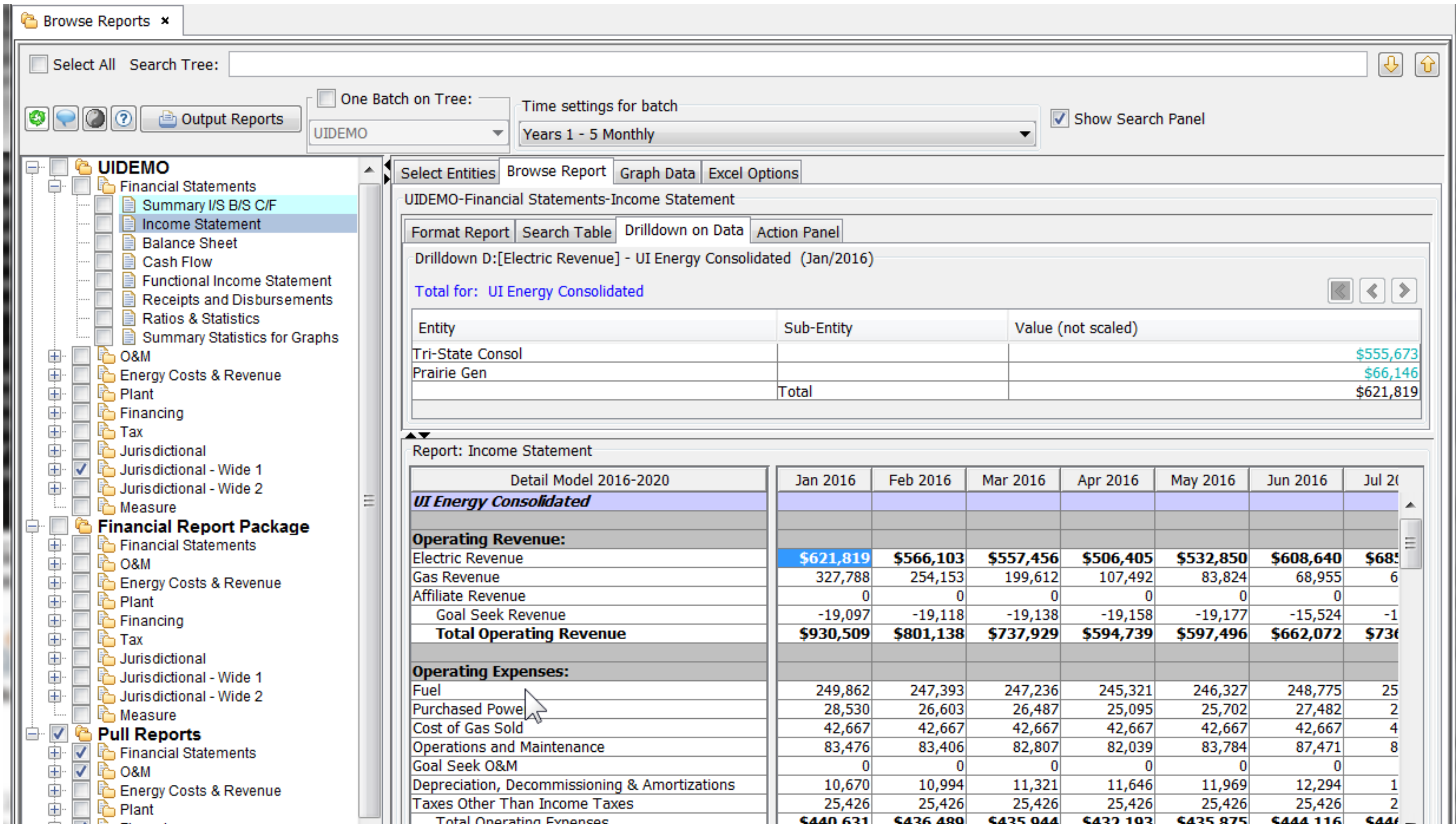
Users typically run the model using the Compile and Run option, which takes all of the calculations in the sequence and uses the java compiler to make a compile (faster) version of the code. It then runs these calculations against the source data. The Compile and Run button has several other options (via dropdown) for running the model. One commonly used option is to run the model from previously published results, which extracts a previously published scenario and pulls the results up, without rerunning the model. This option is much faster, since it does not need to do a compile, and does not run through all the reports and iterations.

If the user desires, rather than running the complete model, they can run only selected reports by unchecking the ones they do not want to run. Note however that if a report is not run, reports that reference it will not receive any values. Therefore users must be cognizant of report relationships when running only selected reports.

An additional capability of the Run Sequence Sets screen is the ability to include the user’s Temp Data case. When the user compiles and runs the sequences for the current scenario, UIPlanner first pulls all data for the cases in the scenario and does winner logic before running. The User Temp data case allows the user to opt to include data in that case in the winner logic. Note that the user needs to actively specify to include the Temp Data case by checking the checkbox.

Each time the user logs into UIPlanner in a new session, the Run Sequence Sets screen resets to preselect all reports and to uncheck the User Temp Data case.

Browse Reports



The Browse Reports screen and its sub-tabs are the heart of the reporting engine for the UIPlanner Financial Model. Some key functionality of this screen:

- All results available - When the Detailed Model sequence is run (or the results are read back from the database), all reports, for all entities for the entire planning horizon for the current scenario are stored in memory and are available through Browse Reports.
- User selections - In Browse Reports the user selects a report, time setting and what entities to see. UIPlanner pulls that back from memory and displays it Browse Reports. As long as the user stays in that scenario and in the current session of UIPlanner, they can switch reports, change columns etc., without rerunning.
- Drilldown - within Browse Reports users can drill down from report to report by merely clicking on a data point.
- On Screen Display vs. MS Excel – users can choose to view the reports on the screen or send them to MS Excel

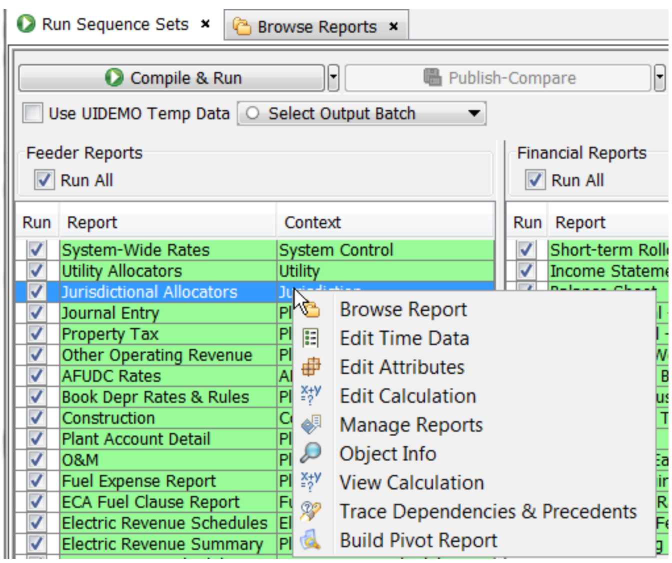
- Results stay available - The user can change screens or close Browse Reports entirely and the results will still be available – just reopen Browse Reports.
- Scenario Comparison - Browse Reports also has scenario comparison functionality that allows the user to take the current scenario and pull in results from other scenario(s). Every report in the model will show the differences between scenarios.
- Format Reports – Users can format labels and line settings for a given report right on the screen.

If the Model sequence set has not been run, the Browse Report screen will be blank.

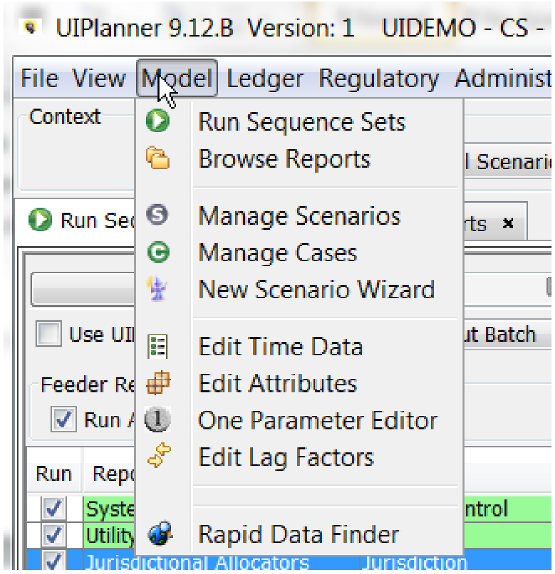
How to open Browse Reports

There are several ways to open the Browse Reports screen

Right Click from any report on the Run Sequences screen.



Select the Browse Reports menu item.



Screen Layout

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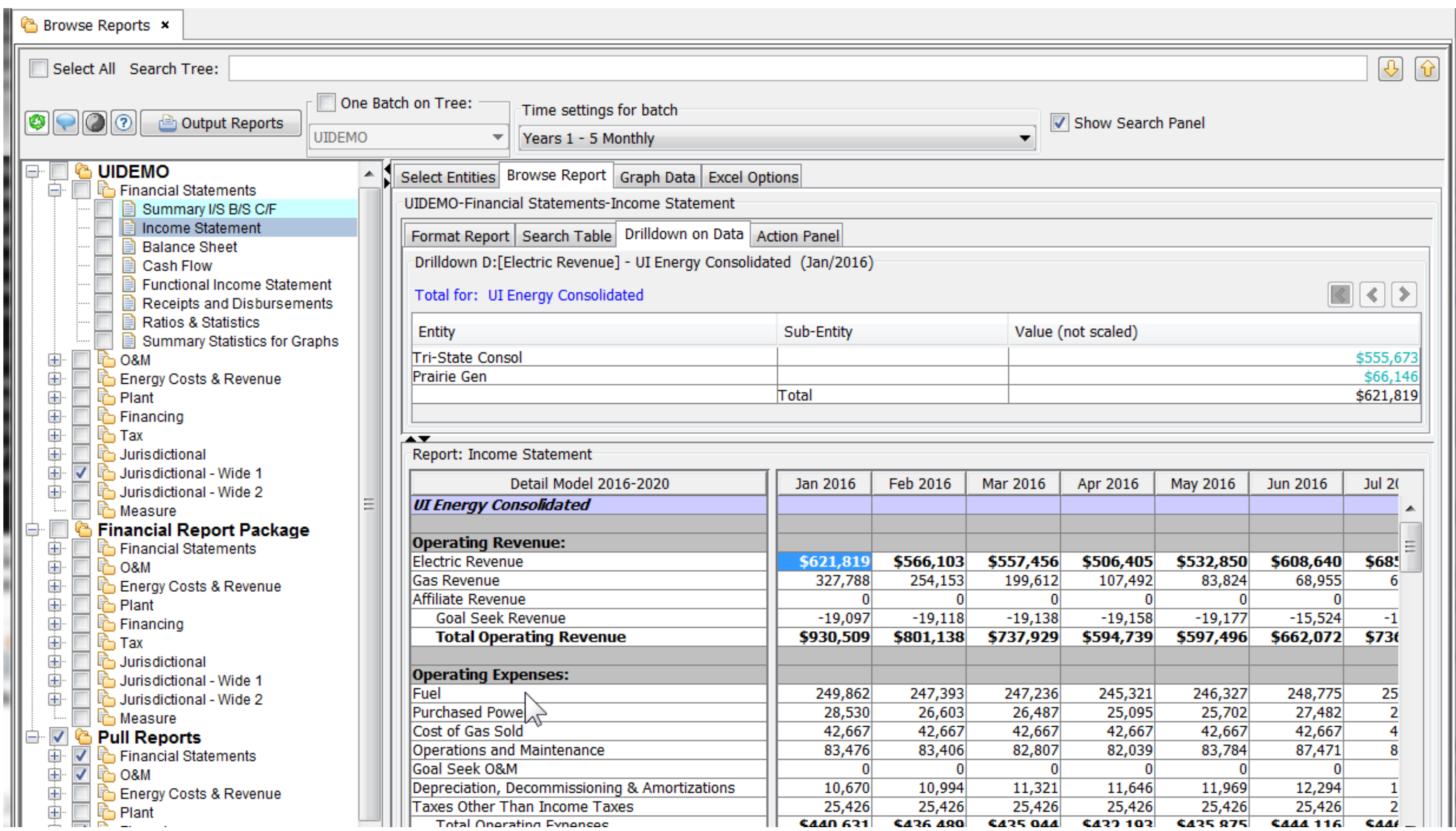


The Browse Reports screen is divided into three regions:

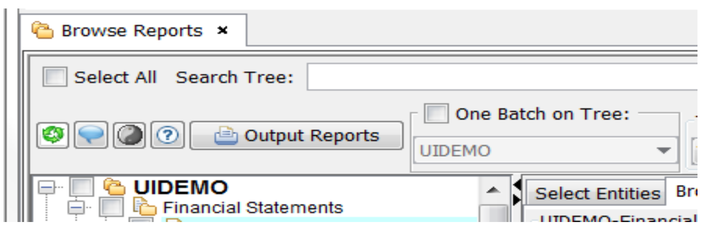
- **Report Tree -** The left side of the screen displays the Report Tree. The report tree has three levels – Batch, Report Group and Report.
- **Reports/Option Tabs –** The body of the screen display on the right (series of tabs and sub tabs) will change depending on the level selected on the tree (Batch / Report Group / Report)
- **Batch Settings and Additional Options -** The top of the Browse Reports screen contains Batch level options, along with useful shortcut buttons.

Note that the tabs and selections that appear in the working region on the right side of the screen are dependent upon the level selected in the tree.

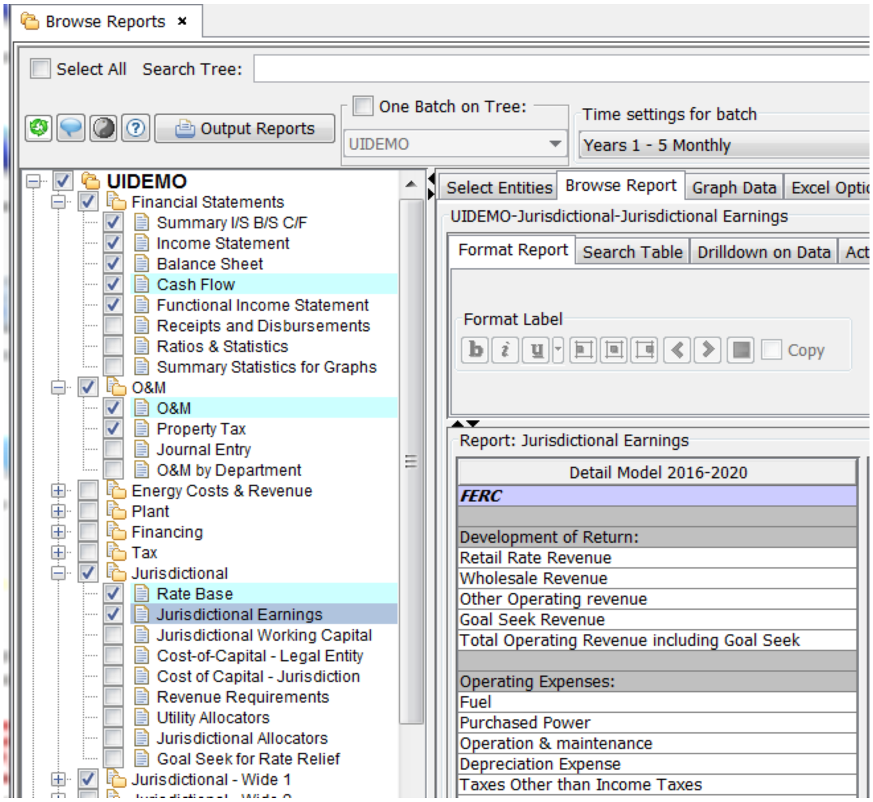
- **Report Batch -** when a report batch is selected on the tree, the working region will display Report Batch Options. See Report Batch Options.
- **Report Group -** when a report group is selected on the tree, the working region will display Report Group Options. See Report Group Options.
- **Report Level -** when a specific report is selected on the tree, the working region will display Report Options. See Report Options.

In the top region of Browse Reports are several important buttons or selections.

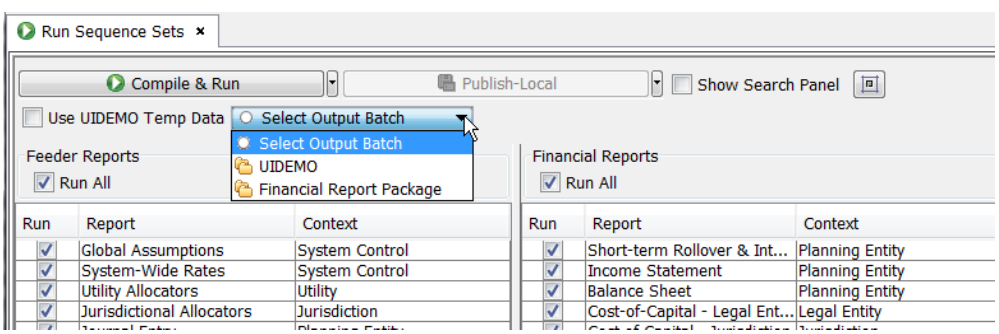
Output Reports



The Output Reports button will launch whatever actions and settings are specified on the Output Options tab of Batch Settings (e.g., Export to Excel, Export for Pull Reports, etc), or in the More Batch Options tab of Batch Settings. Note that the action will only be taken for reports for which each level (Batch/Report Group/Report) is selected via checkbox. This is the significance of the checkboxes. See below.

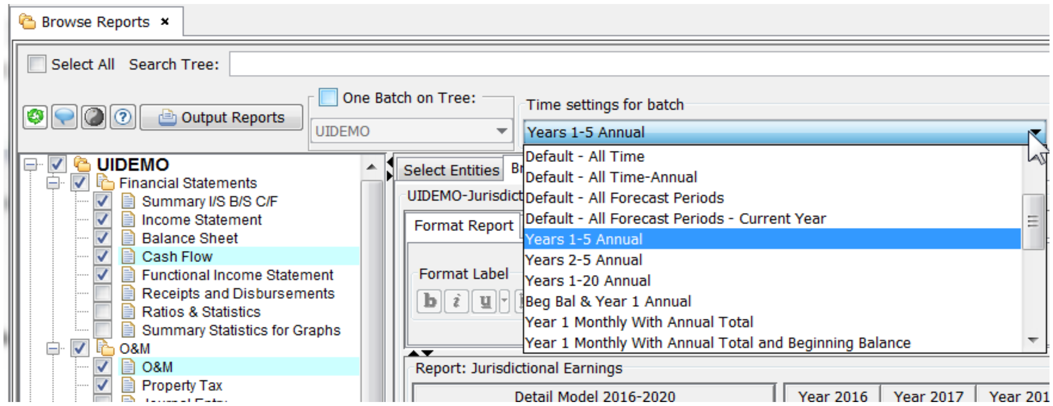


The Output Reports action can also be launched from Run Sequences, if the user has selected a batch from the dropdown box.



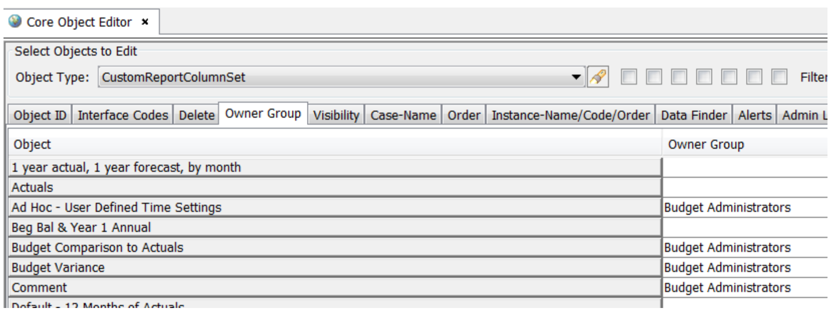
Time Settings by Batch

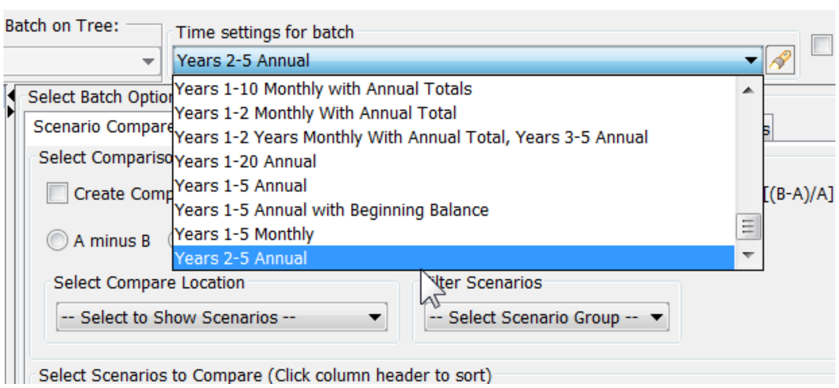
This dropdown list is used to set the default column set for the selected batch. Note that this can be overridden at the Report Group level.



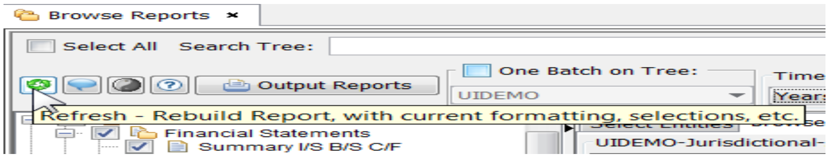
Note that the column sets are only shown where the user has read access. This can be used to filter out column sets that the user does not need.

Given the following owner groups, the user's Column Set list is filtered appropriately.



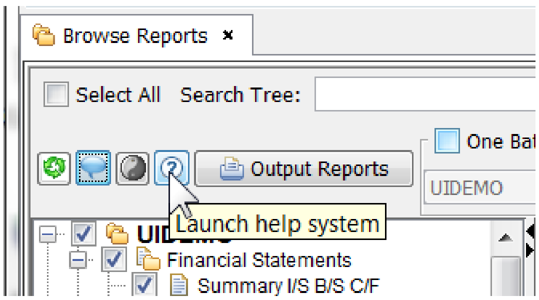


Refresh



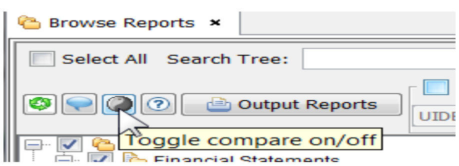
The Refresh button will repaint the Browse Reports screen and update references. It is sometimes necessary to refresh Browse Reports to reflect changes in the current session, such as new custom column sets, or certain changed report formatting.

Help

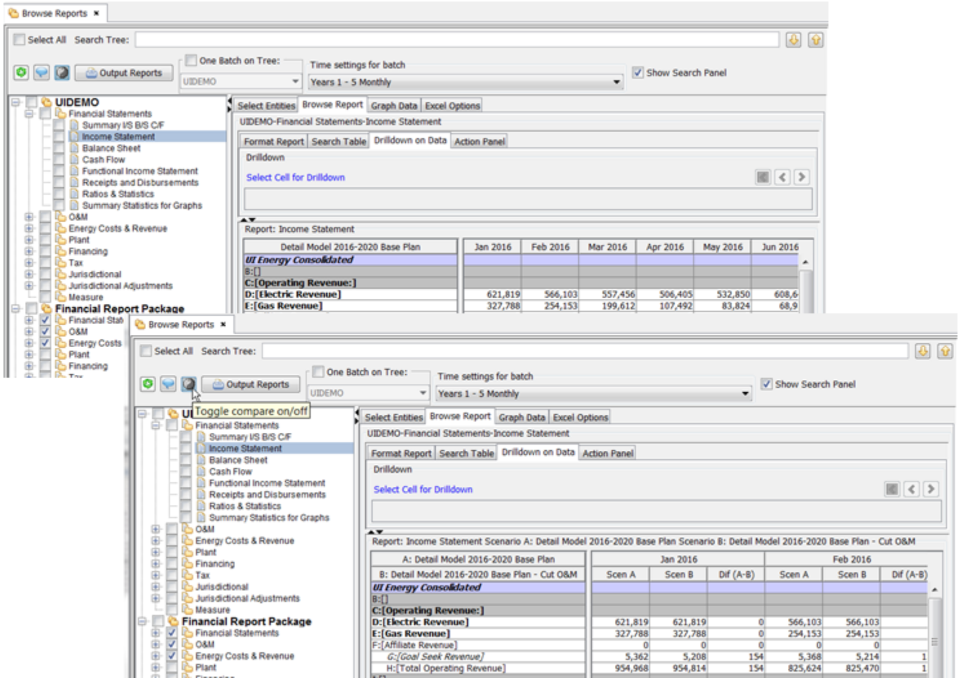


The Help button will launch the Browse Reports topic in UIPlanner Help button.

Toggle Compare On/Off

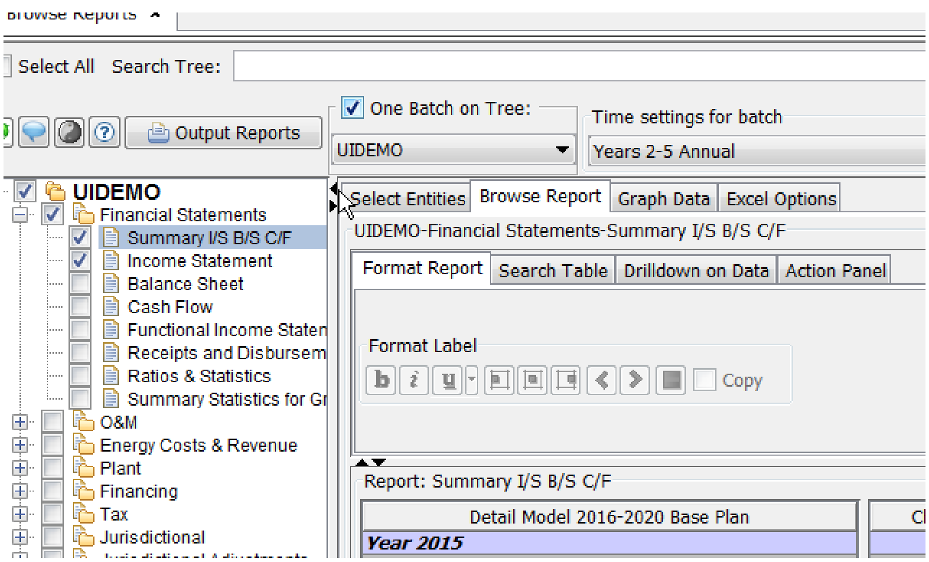


If the user has set Scenario Compare options and has selected a scenario for comparison, this button will turn Scenario Compare on or off. This can be a time saver, as otherwise the user would need to go to the Output Options tab, select Scenario Compare, and turn it on (or off). See below.

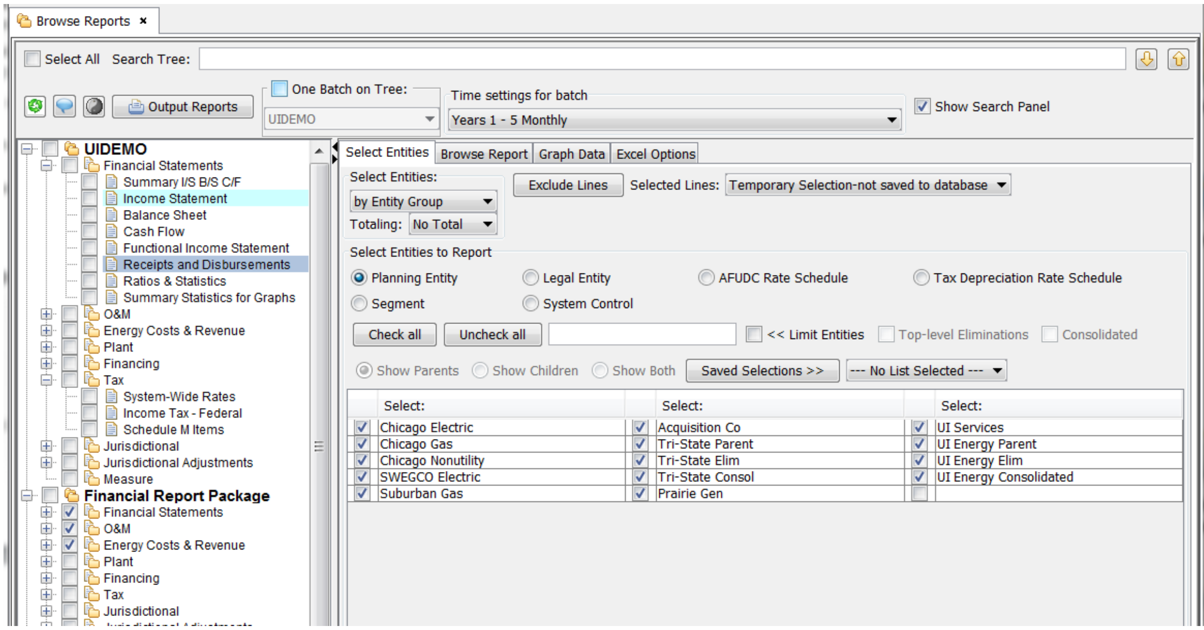


Screen Navigation

In order to allow the user to make optimum use of the screen space, the Browse Reports screen has controls that expand/-collapse selected screen sections.



Browse Reports Screen - Report Tree



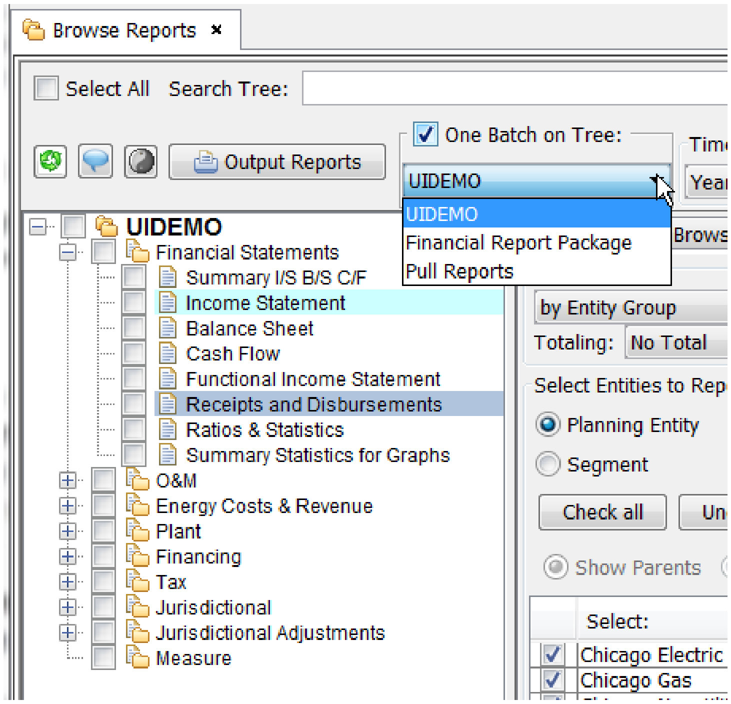
The Report Tree is the primary navigation means within the Browse Reports screen.

- Select a Batch to configure its settings
- Select a Report Group to configure its settings
- Select (highlight) individual reports in order to view (browse) them. When a given report is selected in the tree, its available options appear to the right, along with the results. The Report Tree highlights reports viewed during the user's session. This color can be modified as a User Preference
- Use the checkboxes at the Batch/Report Group/Report levels to
    - Select groups of reports and individual reports for processing all at once using the Output Reports button (see Output Reports)
    - Tag reports in a wide group for display as wide (see How to – Run Wide Reports)
- Use the +/- icons to expand or collapse sections of the tree

One Batch on Tree

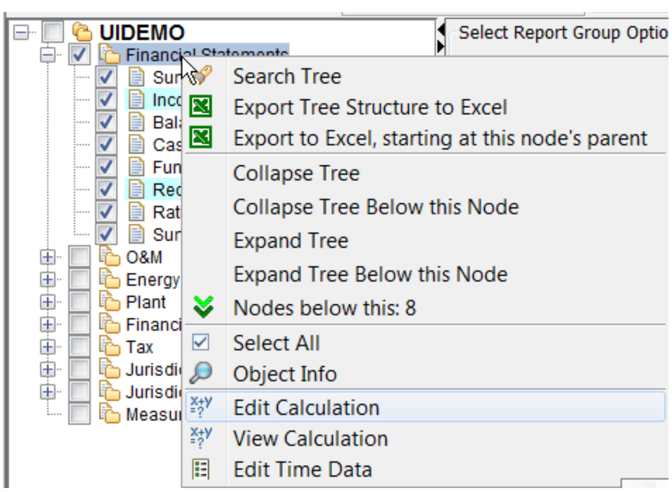
The Report Tree can show all batches or can be set to show only one batch on the tree. This can be helpful if there are many batches. Also, many users prefer to show only their User Batch on the tree, for simplicity and to prevent accidentally modifying a public batch.

The One Batch on tree is set using a dropdown list and checkbox in the top region of the Browse Reports screen.



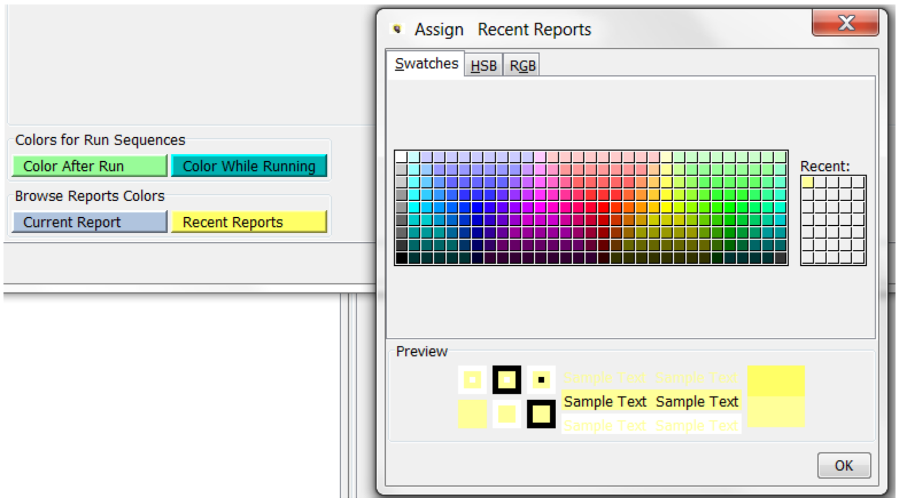
Report Tree Right Click Options

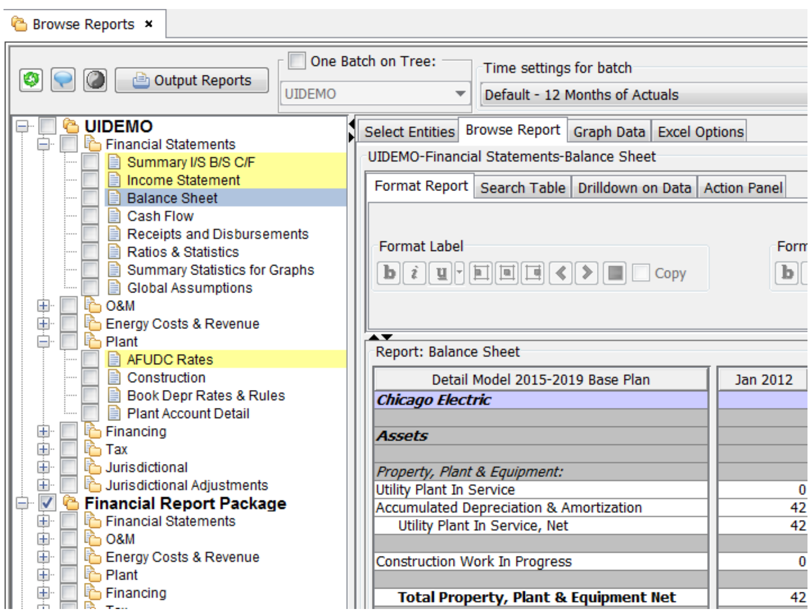
Right clicking on a node in the Report Tree brings up a number of options.



Recently Selected Reports - Color

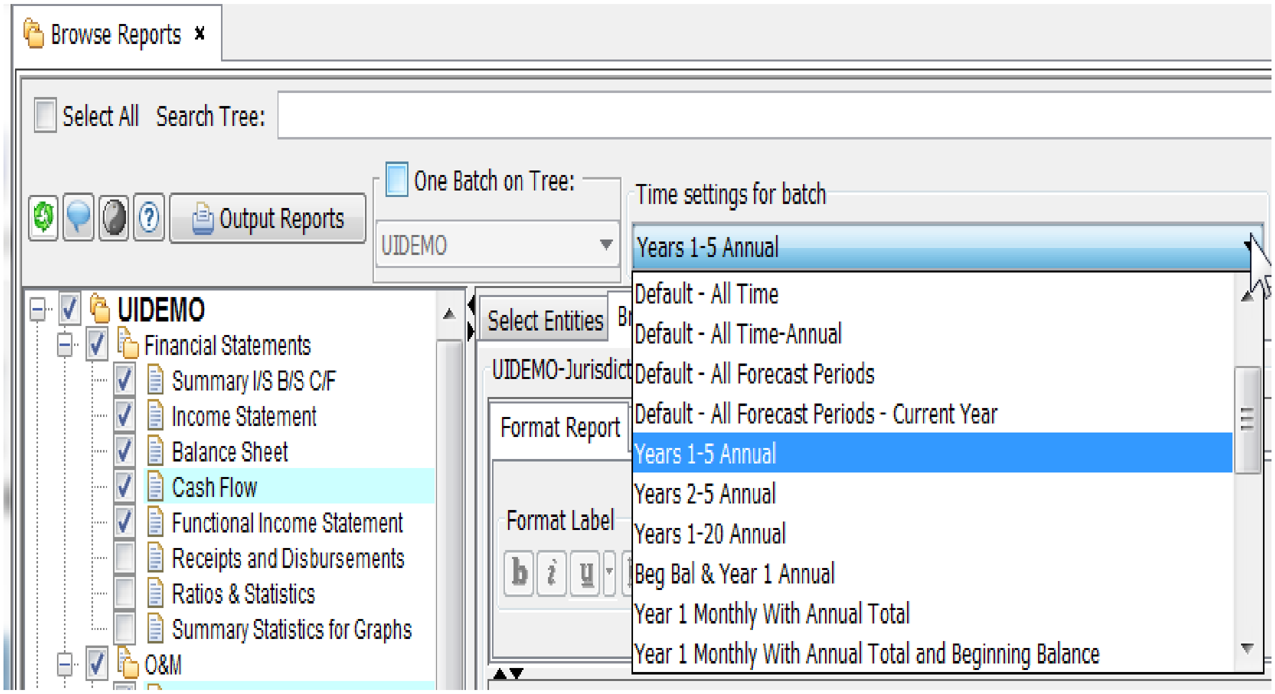
The report tree highlights the most recently selected reports for the user. This can be helpful if needing to find recently selected reports. Note that the colorization is reset when the user exits the model. There is a user preference that allows the user to customize the color for the current report and recent reports.





Recently Selected Reports Dialog

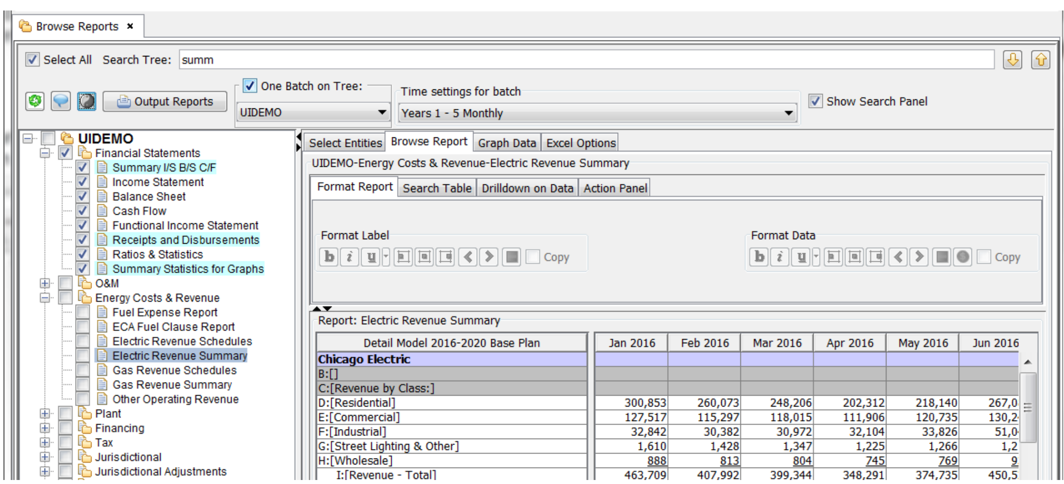
The report tree section includes a button that allows a user to see a list of the recently viewed reports (from the current session) and choose from that list. This is especially helpful for implementations with a large number of reports.



When the user selects the Recent Reports button, a dialog window comes up listing the recently selected reports by Batch and Report Group. Hitting the “Select” button beside a given report will open that report. Note that this list will be reset when the user’s session ends.

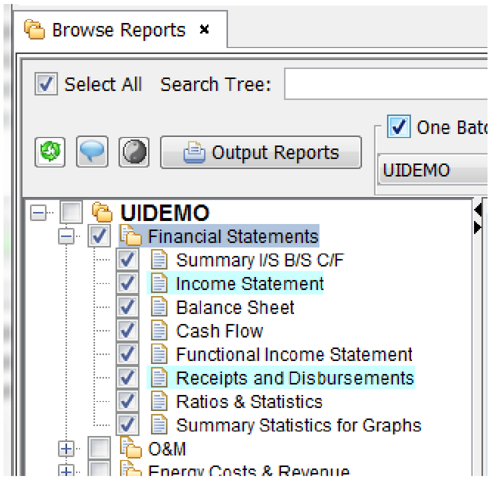
Search Tree

When the Show Search Panel checkbox is selected, it brings up a text box. Enter a text string in the text box and use the up and down arrows to search within the tree for reports containing that text.



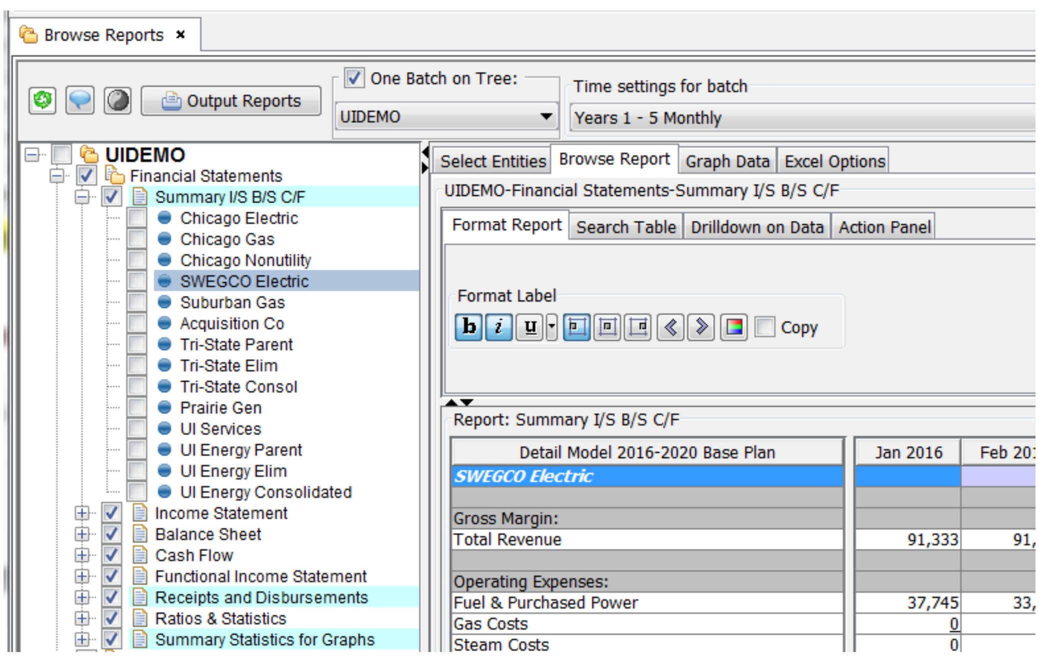
Select All

This check box checks the selection box for the currently selected tree node and all nodes under it. Note - the Select All checkbox is visible only when the Show Search Panel is checked.



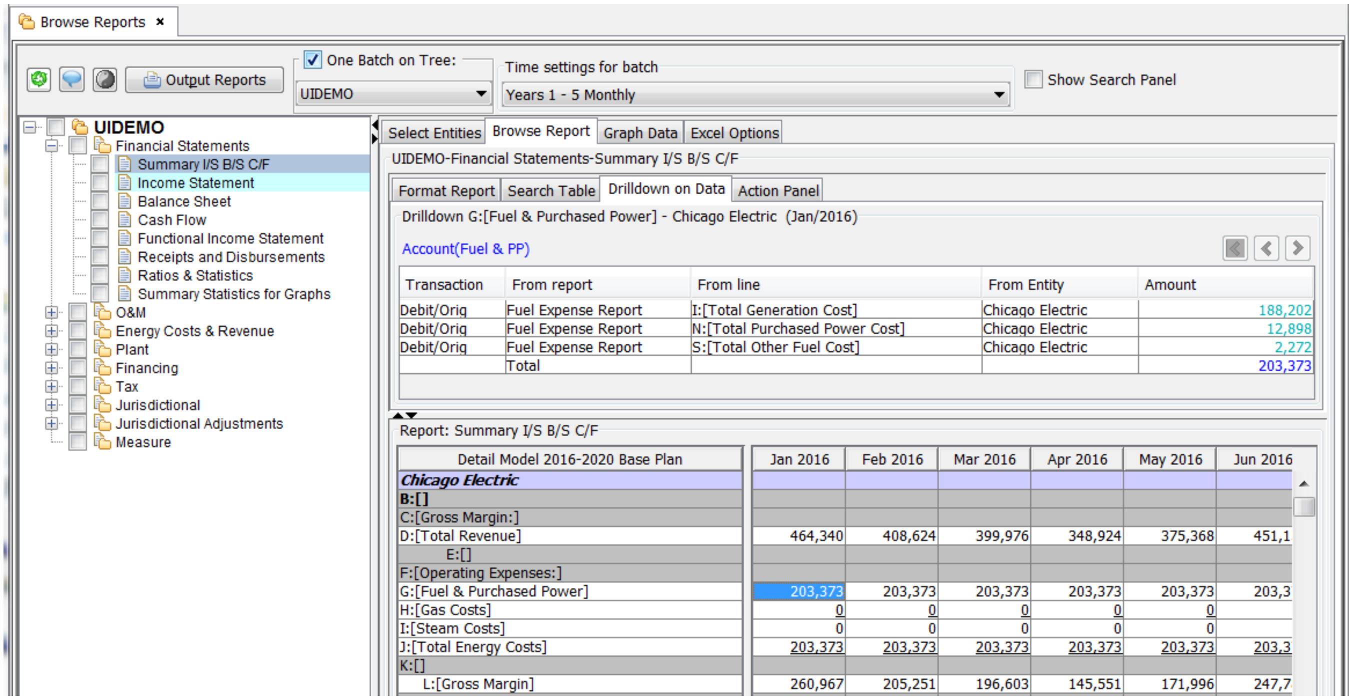
Show Entities on Batch Tree

If desired, the Report Tree can be expanded to also show entities for each report. This option is set on the Output Options tab of Batch settings.



When the Report Tree is in this view, users can simply highlight the desired entity in the tree to view its report.

Report Options



Report Options is where the actual report results are displayed (for the report highlighted on the Report Tree). It is also where the user chooses the detail settings for that report. When a report is selected in the tree, the right side of the Browse Reports screen shows the report results, plus four tabs for configuring the report results and performing other actions, such as sending the report to Excel. The four tabs are:

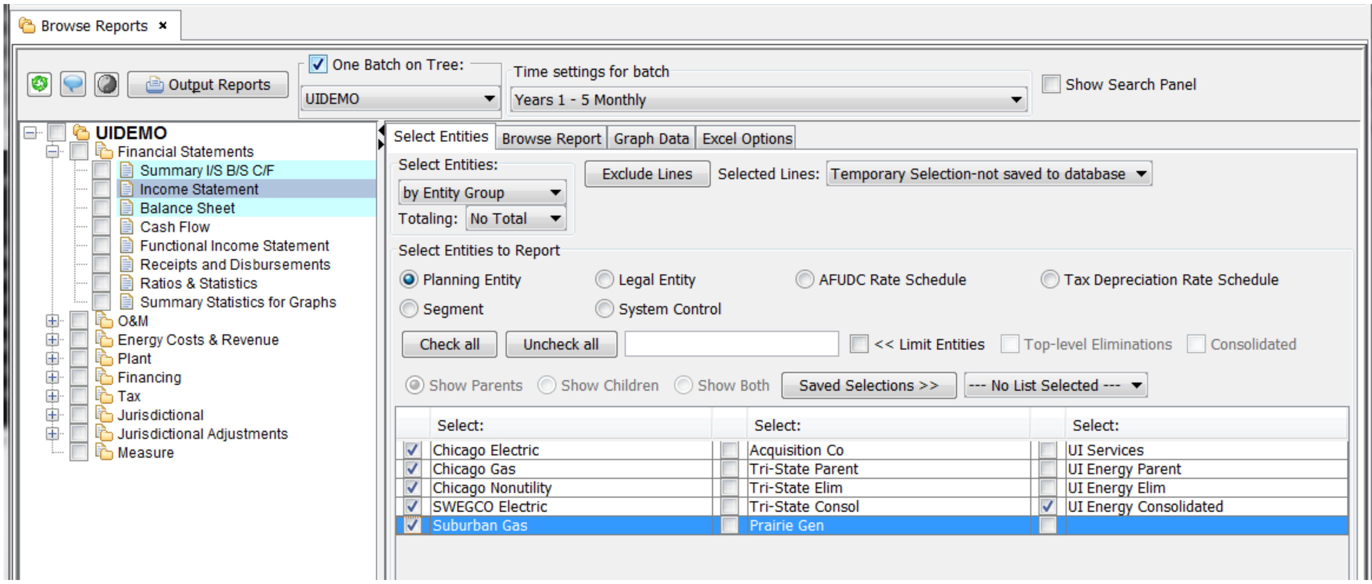
Select Entities Tab – this tab is used to select which entities are displayed in the report, as well as totaling options.

Browse Reports Tab - (shown above). This tab is where the report results are displayed.

Graph Data Tab – used for creating and displaying graphs off of the report data.

Excel Options Tab – allows the user to configure various settings for when reports are exported to Excel.

Report Options - Select Entities Tab



The Select Entities tab determines which entities are displayed for a given report, as well as the totaling options. This tab also allows the user to display only selected lines of the given report. For both Line selections and Entity selections, selections can be saved to the database for use by other users.

This tab has three regions:

- **Select Entities and Totaling** (top) – provides different options for which entities to report, as well as totaling options. Also includes the Exclude Lines selection (see Exclude Lines)
- **Select Entities to Report** (center) – lists the available entities for the report, based on the
- **Entity List** (bottom) – lists the entities for the report (changes depending on the selection made in the Select Entities to Report

Note that the Select Entities region is different for two dimensional reports, allowing the user to select from each of the two dimensions, and to swap their ordering in the report. See Two-Dimensional Reports below for more information,

Select Entities and Totaling

Select Entities: This drop-down selection determines what appears in the Select Entities to Report region. The four selections are:

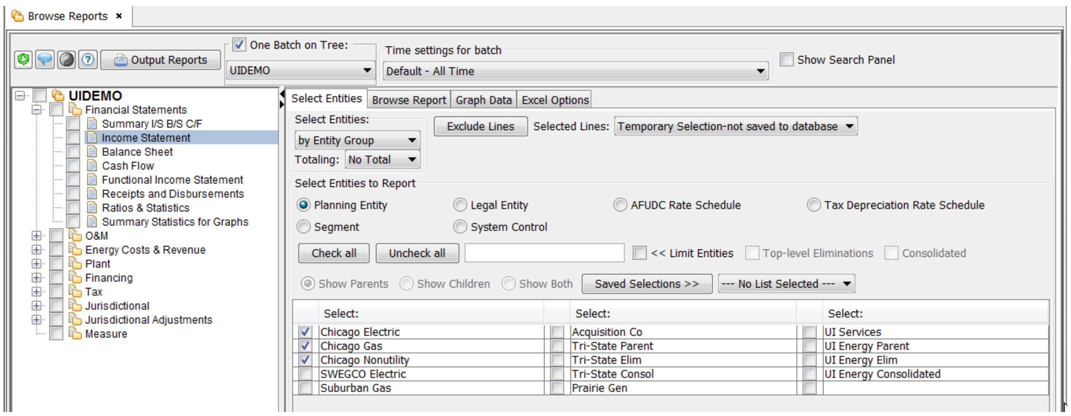
- **Entity Group** – allows the user to report by the context entity group or by any of the entities it has rollup associations to.

- **Association** – allows the user to report by any of the context entity group's
- **Tree** – if the entity group has a tree defined, it is available for reporting
- **n-level tree** - if the entity group has an n-level tree defined, it is available for reporting

Reporting by Entity Group is the most commonly selected option. Below are examples of Entity Group and Association.

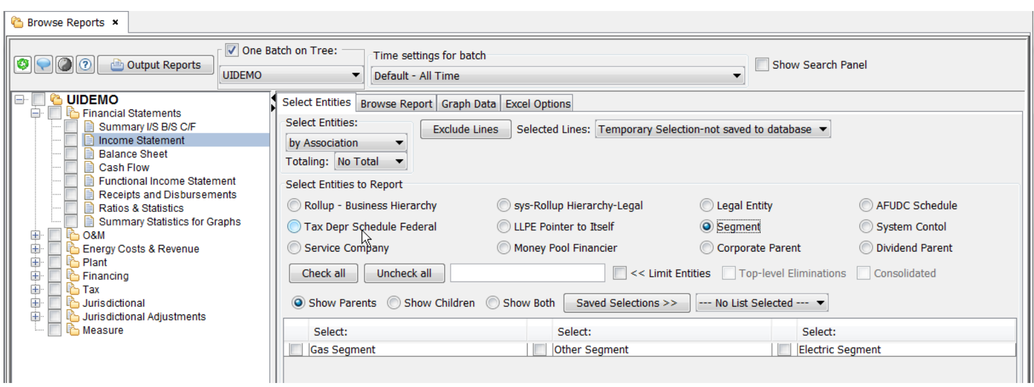
Entity Group.

Note that Planning Entity (the Context Entity) is first in the list, followed by all entity groups to which Planning Entities have rollup associations.



Association

Note that the options include all associations for the report context entity group.



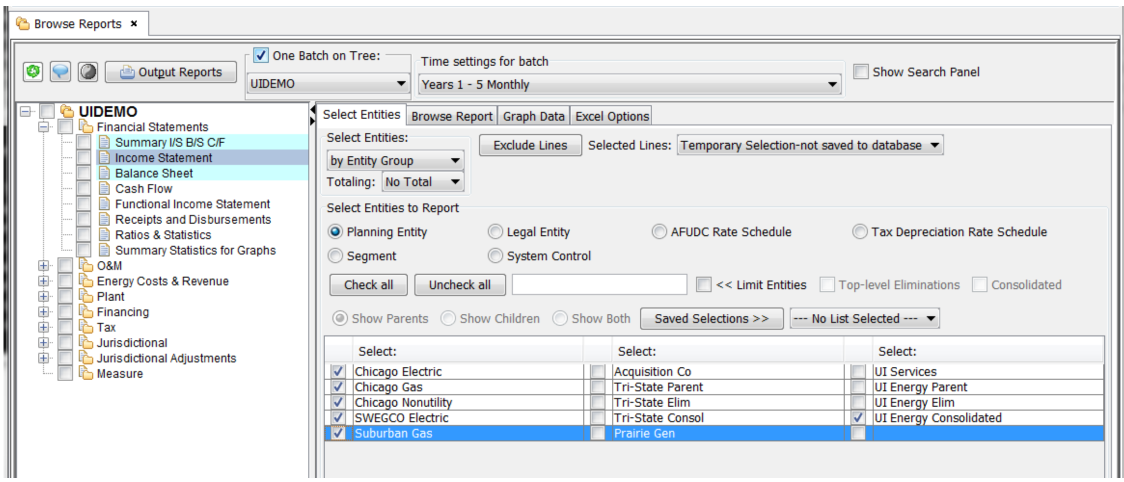
Totaling

Provides the options to report as follows:

- With Total – reports entities selected, with a total by line at the end of the report.
- Only Total – displays the totals with no entity details.
- No Total – displays only the selected entities, with no totals at the end of the report

Select Entities to Report

The Select Entities to Report region is where the user chooses which entities to report on for a given report. As noted above, this region changes based on the selection in the Select Entities drop-down list in the Select Entities and Totaling region.

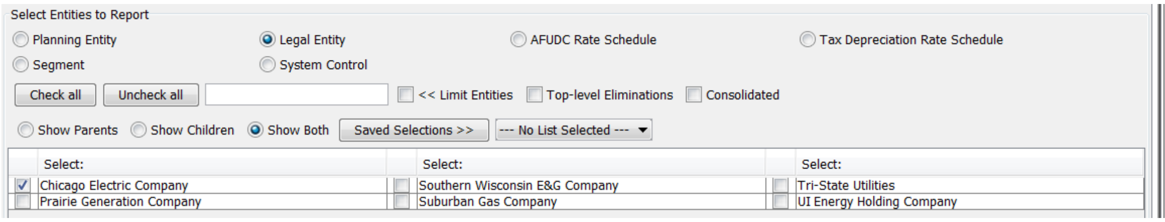


Select the entities to report using the checkboxes. The Check All and Uncheck all buttons allow the user to select or deselect all entities.

Note – when one or more entities in a given entity group are selected for one report (e.g., Planning Entities are selected for the Income Statement), those same entities are selected for all reports in the batch that run over that entity group.

Show Parents / Show Children / Show Both

When the user has chosen to report by a rollup relevant to the selected entity group (e.g., Legal Entity), this provides an option to see the parents and children separately or together. Note that if the user elects to show parents only, results for children are always available via drill-down. In the following example, the use selected Show Both. Note that the report shows the Legal Entity (parent) plus the children.



Report: Summary I/S B/S C/F

Detail Model 2014-2018 Base Plan	Chicago Electric Company	Chicago Electric	Chicago Gas	Chicago Nonutility
Year 2015				
Gross Margin:				
Total Revenue	5,508,204	5,024,157	484,047	0
Total Energy Costs	2,369,389	2,369,389	0	0
Gross Margin	3,138,815	2,654,768	484,047	0
O&M Before Goal Seeking	837,884	745,643	90,932	1,309
Goal Seeking O&M	0	0	0	0
O&M	837,884	745,643	90,932	1,309
Taxes Other Than Income	209,588	150,978	58,448	162
EBITDA	2,091,343	1,758,146	334,667	-1,470
Depreciation & Amortization	600,187	493,539	106,648	0
EBIT	1,491,156	1,264,608	228,019	-1,470
Total Interest Expense	476,108	217,499	258,562	47
Total Other Income	3,591	3,034	557	0
Earnings Before Taxes	1,018,639	1,050,143	-29,986	-1,517

Top Level Eliminations

When this box is checked, top-level eliminations are displayed on the selected report.

Report: Summary I/S B/S C/F

Detail Model 2014-2018 Base Plan	Chicago Electric Company	Chicago Electric	Chicago Gas	Chicago Nonutility	UI Energy Elim
Year 2015					
Gross Margin:					
Total Revenue	5,508,204	5,024,157	484,047	0	-245,976
Total Energy Costs	2,369,389	2,369,389	0	0	0
Gross Margin	3,138,815	2,654,768	484,047	0	-245,976
O&M Before Goal Seeking	837,884	745,643	90,932	1,309	-452,199
Goal Seeking O&M	0	0	0	0	0
O&M	837,884	745,643	90,932	1,309	-452,199
Taxes Other Than Income	209,588	150,978	58,448	162	0
EBITDA	2,091,343	1,758,146	334,667	-1,470	206,223
Depreciation & Amortization	600,187	493,539	106,648	0	0
EBIT	1,491,156	1,264,608	228,019	-1,470	206,223
Total Interest Expense	476,108	217,499	258,562	47	-52,888
Total Other Income	3,591	3,034	557	0	-1,211,877
Earnings Before Taxes	1,018,639	1,050,143	-29,986	-1,517	-952,766

Consolidated

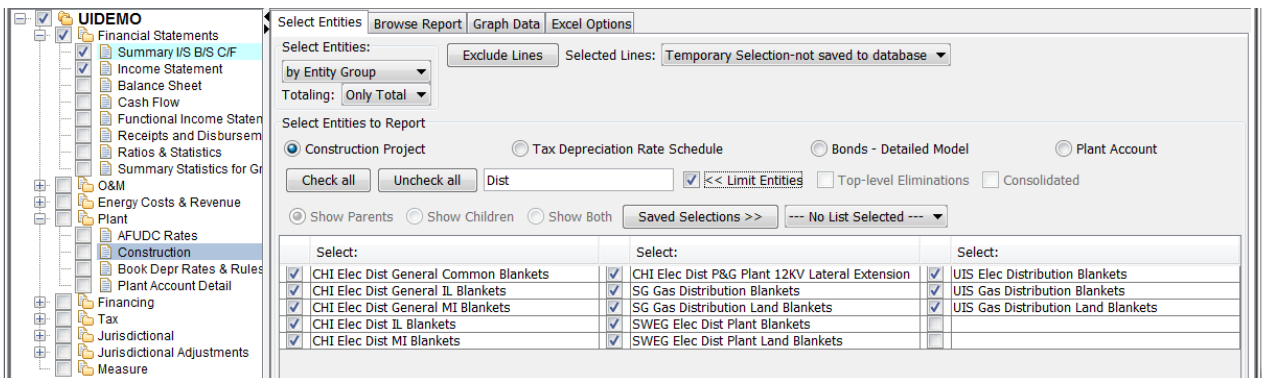
When checked, consolidated results are displayed on the selected report.

Report: Income Statement

Detail Model 2014-2018 Base Plan	Chicago Electric Company	Chicago Electric	Chicago Gas	Chicago Nonutility	UI Energy Elim	UI Energy Consolidated
Year 2015						
Operating Revenue:						
Electric Revenue	5,024,157	5,024,157	0	0	0	6,859,037
Gas Revenue	446,673	0	446,673	0	0	1,542,293
Affiliate Revenue	0	0	0	0	-245,976	0
Goal Seek Revenue	37,374	0	37,374	0	0	37,374
Total Operating Revenue	5,508,204	5,024,157	484,047	0	-245,976	8,438,704
Operating Expenses:						
Fuel	2,219,119	2,219,119	0	0	0	2,897,104
Purchased Power	150,269	150,269	0	0	0	316,468
Cost of Gas Sold	0	0	0	0	0	473,564
Operations and Maintenance	837,884	745,643	90,932	1,309	-452,199	977,648
Depreciation, Decommissioning & Am...	600,187	493,539	106,648	0	0	1,032,901
Taxes Other Than Income Taxes	209,588	150,978	58,448	162	0	284,762
Total Operating Expenses	**$4,017,048**	**$3,759,549**	**$256,028**	**$1,470**	**($452,199)**	**$5,982,447**

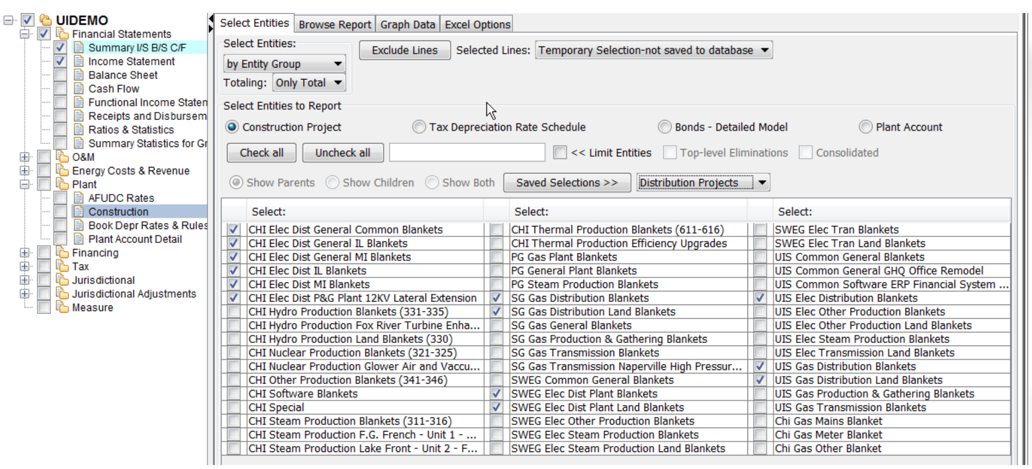
Limit Entities

The Limit Entities Text box allows the user to do a text search to filter down the entity list. See below.

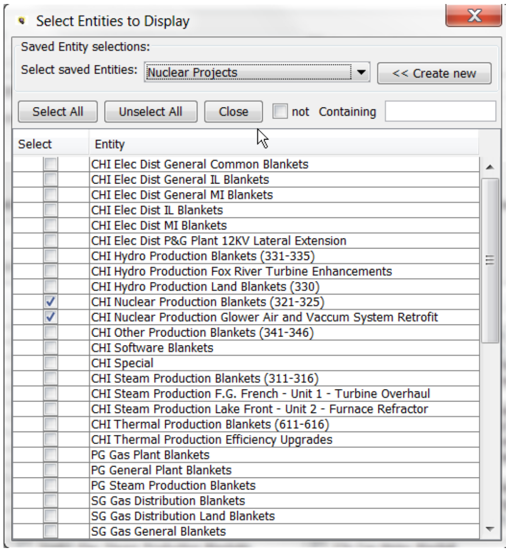


Saved Entity Selections

The Saved Selections button allows the user to select from a previously saved list of entities. These saved lists are available to all users (not a user preference).



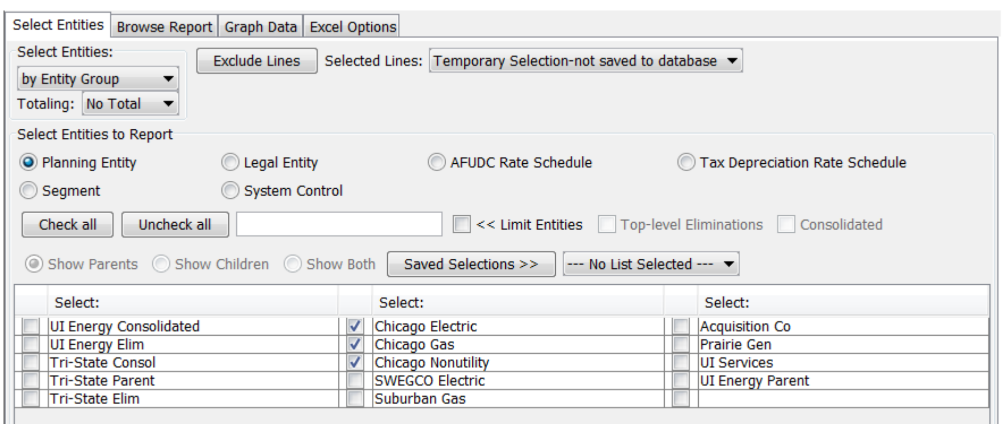
To create a saved list, hit the Saved Selections button, and use the Create New button to create a new, blank selection. Then select it from the dropdown list and configure the selection. Note that the dialog includes Select All/Unselect All buttons as well as embedded text search (with a NOT option). When done, hit Close and then File/Save.



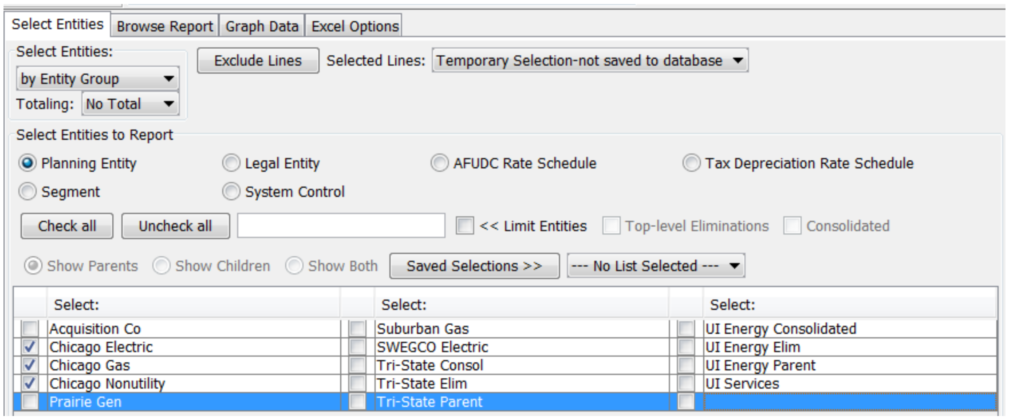
Ordering

The entities in this region are ordered in accordance with the user's View Order preference. Note the ordering of Planning Entities.

User has Scenario Order as their View Order:

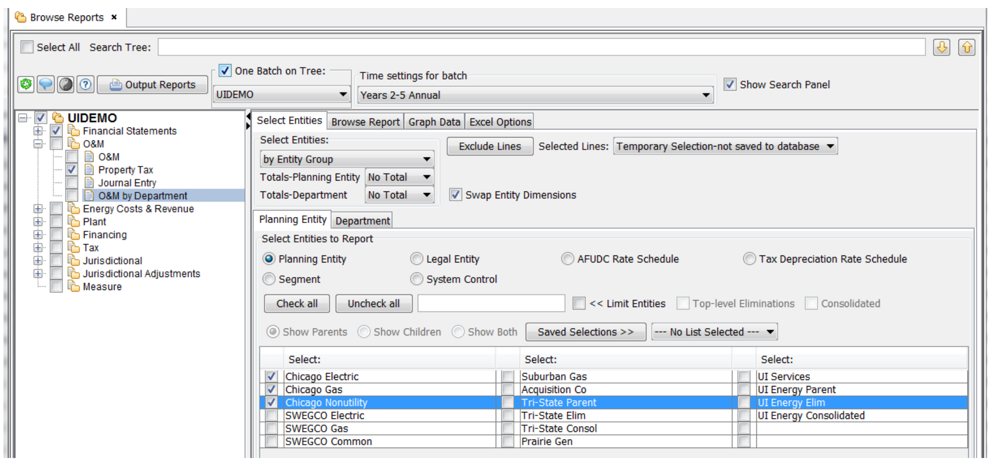


User has Alpha Order as their View Order:



Two-Dimensional Reports

When viewing a 2-D report in Browse Reports, the Select Entities tab will have some additional options to allow the user to select entities and view the report. The Select entities tab has tabs for each of the report dimensions. Select the appropriate tab to select the entity or entities to view. Note that each tab has all of the standard functionality. User can also select totaling options separately for the two dimensions.



The Swap Entity Dimensions allows the user to determine which entity is primary and which secondary. See below.

Report: O&M by Department

Detail Model 2016-2020 Base Plan	Year 2015	Year 2016	Year 2017	Year 2018
101-CEO				
Chicago Electric				
Labor	200	220	242	266
Nonlabor				
Benefits - Retired Medical				
Benefits - Active Employees				
Benefits - Pension				
Insurance - Service Company				
Indirect - Service Company				
101-CEO				
Chicago Gas				
Labor				
Nonlabor				
Benefits - Retired Medical				
Benefits - Active Employees				
Benefits - Pension				
Insurance - Service Company				
Indirect - Service Company				

Report: O&M by Department

Detail Model 2016-2020 Base Plan	Year 2015	Year 2016	Year 2017	Year 2018
Chicago Electric				
101-CEO				
Labor	200	220	242	266
Nonlabor	50	55	60	67
Benefits - Retired Medical	10	11	12	13
Benefits - Active Employees	10	11	12	13
Benefits - Pension	50	55	60	67
Insurance - Service Company	0	0	0	0
Indirect - Service Company	0	0	0	0
Chicago Electric				
122-Finance				
Labor	300	330	363	399
Nonlabor	100	110	121	133
Benefits - Retired Medical	10	11	12	13
Benefits - Active Employees	10	11	12	13
Benefits - Pension	50	55	60	67
Insurance - Service Company	0	0	0	0
Indirect - Service Company	0	0	0	0

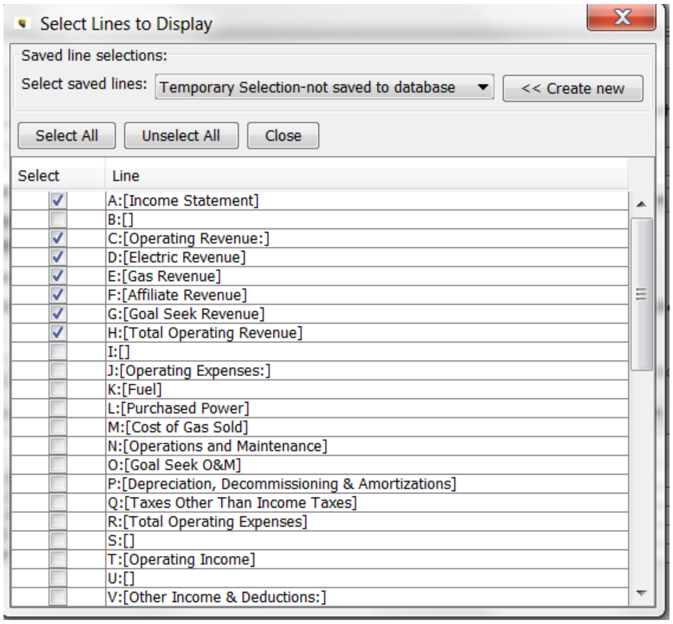
Exclude Lines

The Exclude Lines button allows the user to see/print just selected lines of any report. See below.

Report: Income Statement

Detail Model 2016-2020 Base Plan	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016
Chicago Electric					
Operating Revenue:					
Electric Revenue	464,340	408,624	399,976	348,924	375,368
Gas Revenue	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0
Goal Seek Revenue	0	0	0	0	0
Total Operating Revenue	464,340	408,624	399,976	348,924	375,368
Chicago Gas					
Operating Revenue:					
Electric Revenue	0	0	0	0	0
Gas Revenue	38,232	37,545	36,681	39,657	36,192
Affiliate Revenue	0	0	0	0	0
Goal Seek Revenue	5,362	5,368	5,373	5,379	5,384
Total Operating Revenue	43,593	42,912	42,054	45,036	41,577
SWEGCO Electric					
Operating Revenue:					
Electric Revenue	91,333	91,333	91,334	91,334	91,335
Gas Revenue	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0
Goal Seek Revenue	0	0	0	0	0
Total Operating Revenue	91,333	91,333	91,334	91,334	91,335
Suburban Gas					

To use the Exclude Lines feature, select a report and click the Exclude Lines button on the Select Entities tab. This will bring up a dialog box (shown below) listing all of the lines of the report.

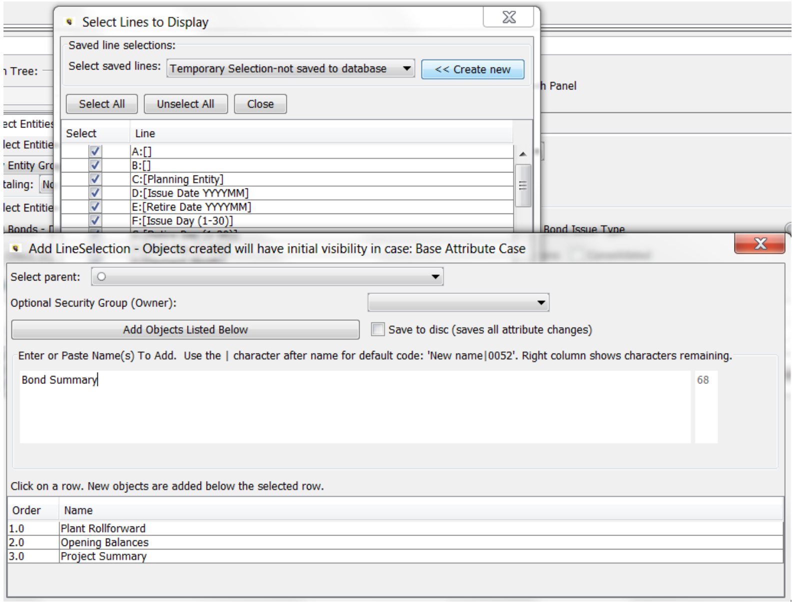


Check only the desired lines and select Close. When the report is next selected, only those lines will be displayed. See above.

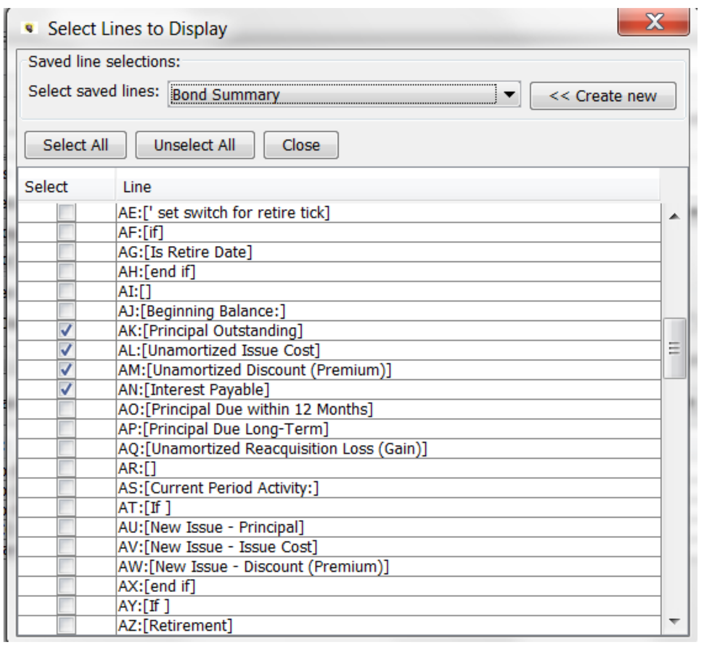
Note that the Exclude Lines selection is session-specific. The next time the user logs in, the checkmarks will be reset to all lines. The reasoning was that this selection is not readily apparent on the Browse Reports screen, and we did not want a user to log out and come back into the model later and not remember that they had filtered the lines to show. In addition, the selection is a user preference, no matter what the Report Batch. It would be confusing if one user could filter the lines on a report in a public batch and then not remember to reset to all lines- this would affect all users.

Saved Line Selections

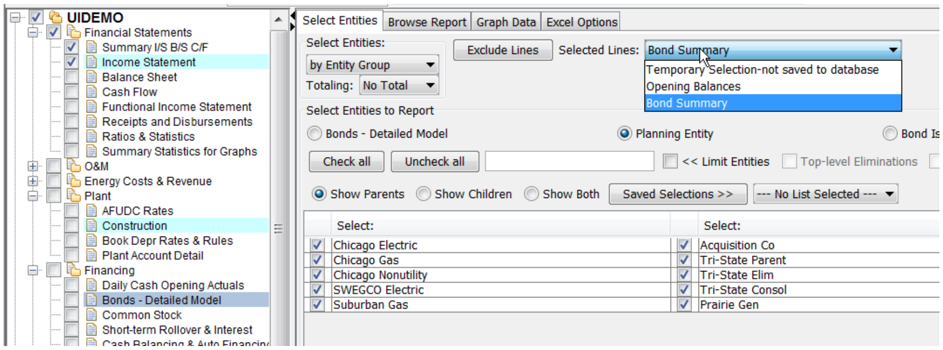
Exclude Line selections can be saved, and be made available to all users. Select a report, and when the Exclude Lines dialog comes up, hit Create New and create the saved selection.

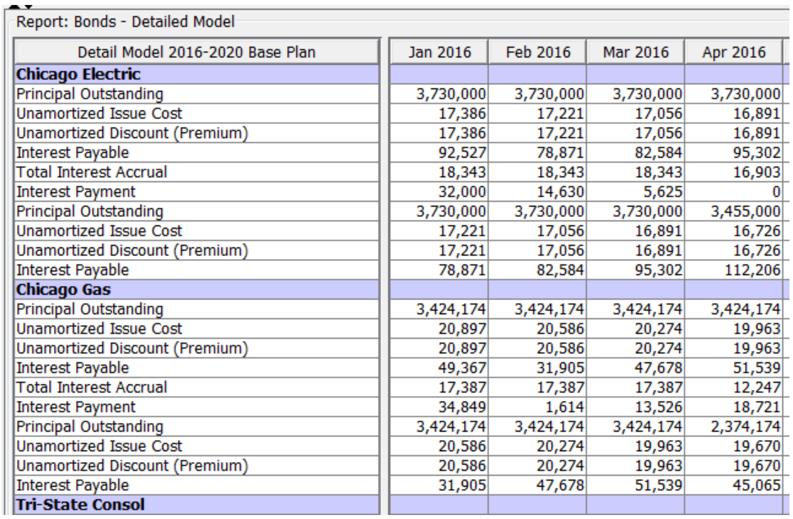


Then select that Line Selection from the dropdown list and check the desired lines. Then select Close.



That line selection will then be available (to all users) in the dropdown list on the Select Entities tab.

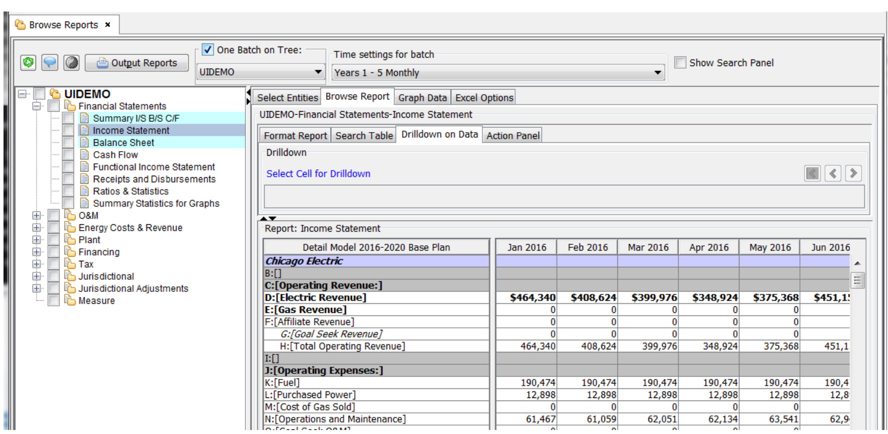




Report: Bonds - Detailed Model

Detail Model 2016-2020 Base Plan	Jan 2016	Feb 2016	Mar 2016	Apr 2016
Chicago Electric				
Principal Outstanding	3,730,000	3,730,000	3,730,000	3,730,000
Unamortized Issue Cost	17,386	17,221	17,056	16,891
Unamortized Discount (Premium)	17,386	17,221	17,056	16,891
Interest Payable	92,527	78,871	82,584	95,302
Total Interest Accrual	18,343	18,343	18,343	16,903
Interest Payment	32,000	14,630	5,625	0
Principal Outstanding	3,730,000	3,730,000	3,730,000	3,455,000
Unamortized Issue Cost	17,221	17,056	16,891	16,726
Unamortized Discount (Premium)	17,221	17,056	16,891	16,726
Interest Payable	78,871	82,584	95,302	112,206
Chicago Gas				
Principal Outstanding	3,424,174	3,424,174	3,424,174	3,424,174
Unamortized Issue Cost	20,897	20,586	20,274	19,963
Unamortized Discount (Premium)	20,897	20,586	20,274	19,963
Interest Payable	49,367	31,905	47,678	51,539
Total Interest Accrual	17,387	17,387	17,387	12,247
Interest Payment	34,849	1,614	13,526	18,721
Principal Outstanding	3,424,174	3,424,174	3,424,174	2,374,174
Unamortized Issue Cost	20,586	20,274	19,963	19,670
Unamortized Discount (Premium)	20,586	20,274	19,963	19,670
Interest Payable	31,905	47,678	51,539	45,065
Tri-State Consol				

Report Options - Browse Reports Tab



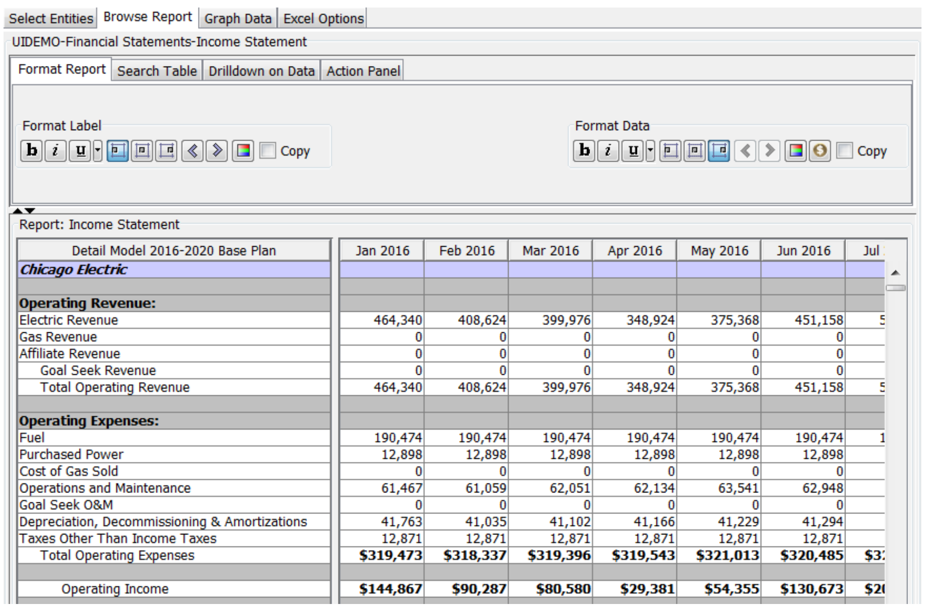
The Browse Reports tab on the BROWSE REPORTS screen is where the results of a selected (on the Report Tree) report are displayed. The results of the selected report are displayed in a pane on the bottom. The format of the report (columns vs. rows) is as defined on the Report Group settings. The data pane indicates the Scenario(s) and the Report selected.

There are four sub tabs across the top.

- Format Report – set formatting for labels and data cells.
- Search Table – search for specific entities in the report results or for text in the labels/data cells.
- Drill-down on Data – drill back into the report results by selecting a specific cell and drilling into the reports/lines feeding it.
- Action Panel – send report results to MS Excel, maximize the report results, or launch the Time Data Editor for that report.

See separate sections for further detail on each of these sub-tabs.

Report Options - Format Report Tab



Detail Model 2016-2020 Base Plan	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul
Chicago Electric							
Operating Revenue:							
Electric Revenue	464,340	408,624	399,976	348,924	375,368	451,158	5
Gas Revenue	0	0	0	0	0	0	
Affiliate Revenue	0	0	0	0	0	0	
Goal Seek Revenue	0	0	0	0	0	0	
Total Operating Revenue	464,340	408,624	399,976	348,924	375,368	451,158	5
Operating Expenses:							
Fuel	190,474	190,474	190,474	190,474	190,474	190,474	1
Purchased Power	12,898	12,898	12,898	12,898	12,898	12,898	
Cost of Gas Sold	0	0	0	0	0	0	
Operations and Maintenance	61,467	61,059	62,051	62,134	63,541	62,948	
Goal Seek O&M	0	0	0	0	0	0	
Depreciation, Decommissioning & Amortizations	41,763	41,035	41,102	41,166	41,229	41,294	
Taxes Other Than Income Taxes	12,871	12,871	12,871	12,871	12,871	12,871	
Total Operating Expenses	**$319,473**	**$318,337**	**$319,396**	**$319,543**	**$321,013**	**$320,485**	**$3**
Operating Income	**$144,867**	**$90,287**	**$80,580**	**$29,381**	**$54,355**	**$130,673**	**$2**

When the Format Report sub tab is selected, the active report is displayed at the bottom of the tab. Two sets of formatting buttons are displayed at the top, Format Label and Format Data. Each set includes the following buttons.

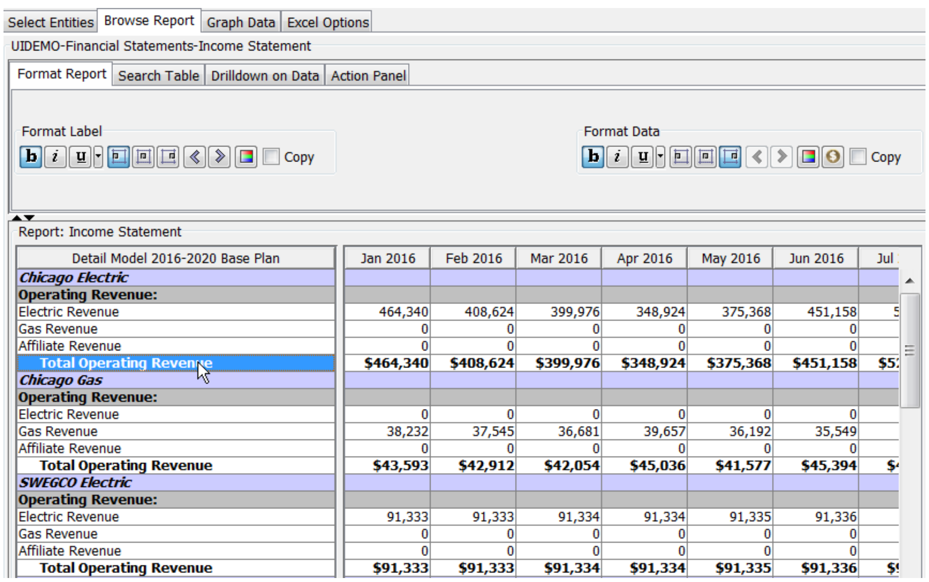
- Bold-face, italics and underline buttons
- Drop-down list for formatting cell borders
- Left align, center align and right align buttons
- Indent left and right buttons (arrows)

- Color options
- Copy checkbox

The Format Label panel controls the formatting of the label lines, and the Format Data panel controls the formatting of the data cells. As labels or data cells are selected in the report, the cell format will be displayed in the drop-down list. Note that cell formatting shown on the screen will also be preserved then the report is exported to Excel. Some cell formatting (cell borders, custom formats) are only visible in Excel outputs.

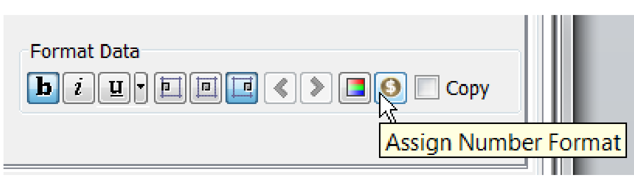
Formatting Lines

To change the cell format for either a label or data cell, highlight the cell and select the desired format from the appropriate drop-down list. Note that when a data cell is formatted, all data cells on that line will be given the same formatting. Additionally, formatting is the same for all entities that the report runs over. See below.

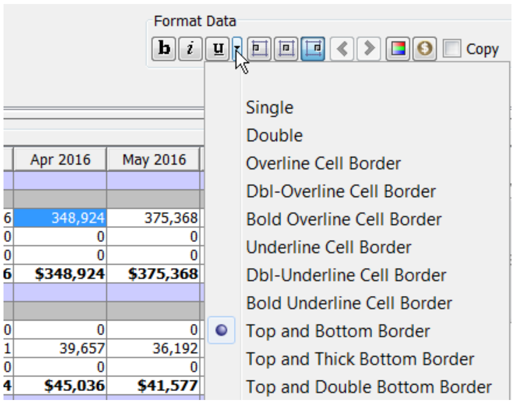


Formatting Options

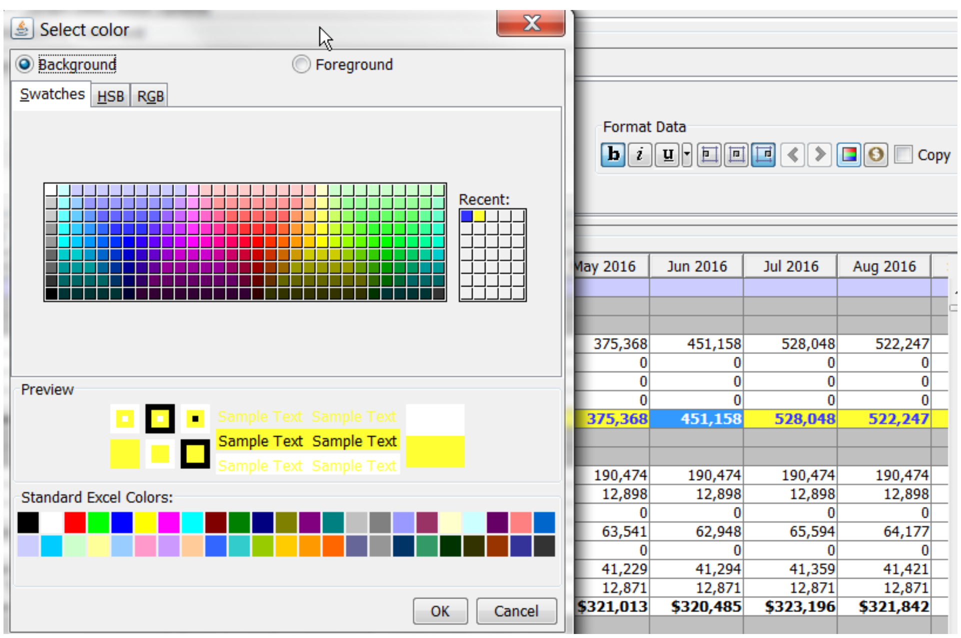
Below is additional detail on several of the various formatting options. Note that each option has a tooltip.



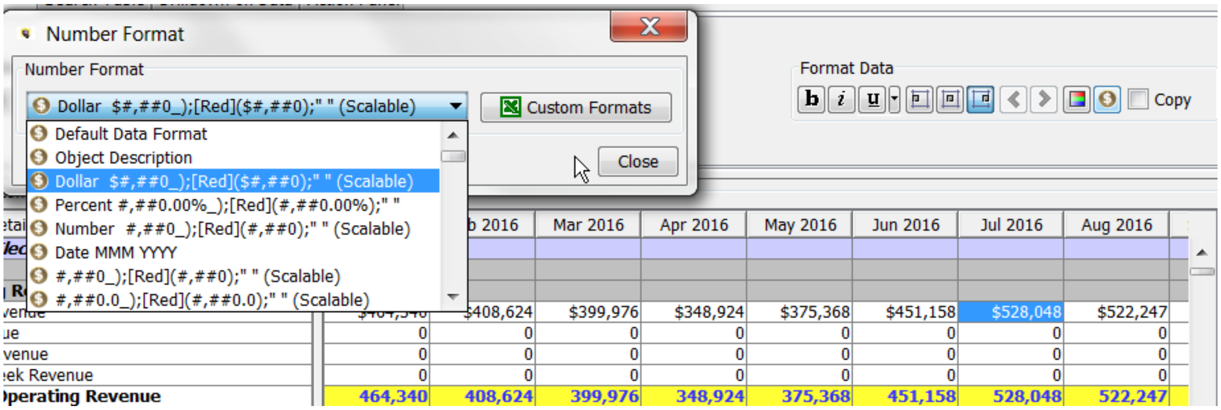
- Bold – Bolds the label/data row
- Italics – Makes the selected label/data row italics
- Underline – underlines the selected label/data line
- Formatting cell borders – this drop arrow brings up a drop list of a number of different cell border options.



- Left align, center align and right align buttons – select these to control the cell alignment of the label/data cells
- Indent left and right buttons (arrows) – to double indent, select the right arrow twice
- Color options – selecting this will bring up a color selector. Users can format both background and foreground (text)



- Assign Number Format – this button brings up a dropdown list of a large number of possible number formats. See below for additional information on number formats.



- Copy checkbox – use this checkbox to copy formatting from one line to another.

Number Formats

There are a large number of cell number formats available. For both dollar, amount and percent there are multiple levels of precision and treatment of negatives. Below are examples of the most used data formats

Report: Bonds - Detailed Model

Detail Model 2016-2020 Base Plan		Formula-Forecast	Jan 2016	Feb 2016	Mar 2016
CHI 4.50% FMB due May 15, 2015					
Principal Outstanding	(Format - Default Data Format)	Input()	150,000	150,000	150,000
Planning Entity	(Format - Object Description)	Association To(Planning Entity)	Chicago Gas	Chicago Gas	Chicago Gas
New Issue Principal	(Format - Dollar $#,####)	Attribute(New Issue Principal)	$150,000	$150,000	$150,000
Variable Interest Rate	(Format - Percent #,##0.00%)	Input()	0.42%	0.42%	0.42%
Issue Date YYYYMM	(Format - MM YYYY)	Attribute(Issue Date (yyyymm))	Aug 2002	Aug 2002	Aug 2002
Interest Payable	(Format - #,##0.000)	Previous(DU:[Interest Payable])	3,480.556	563.889	1,147.222
New Issue Cost Percent	(Format - #,##0.0000%)	Input()	0.3333%	0.3333%	0.3333%
Issue Day (1-30)	(Format - ###0)	Attribute(Issue Day)	15	15	15
Year	(Format - ###0)	Current Year()	2016	2016	2016

Tips:

It is recommended that unless needed for a report display that the number formats on reports be left as the Default Data Format. There are several reasons for this:

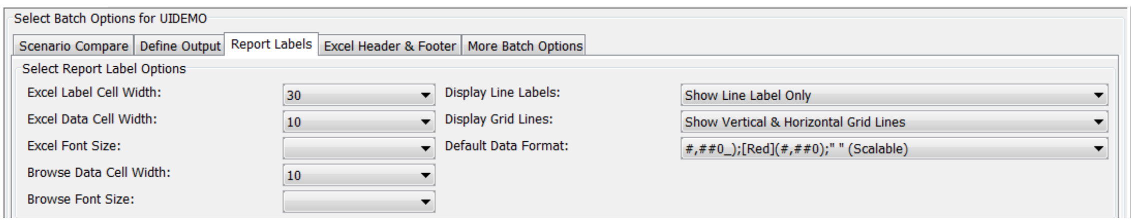
- Defining each line with a specific data format takes disk space and adds time to formatting
- It takes time to manually format each line.
- Leaving lines as Default Data Format preserves flexibility for users to define their own Default Data Format (see Report Labels Tab).

For formatting integers (month numbers or year numbers), use the format ###0. This format is not scalable, and will display the same for reports in dollars, thousands or millions.

Report: Bonds - Detailed Model

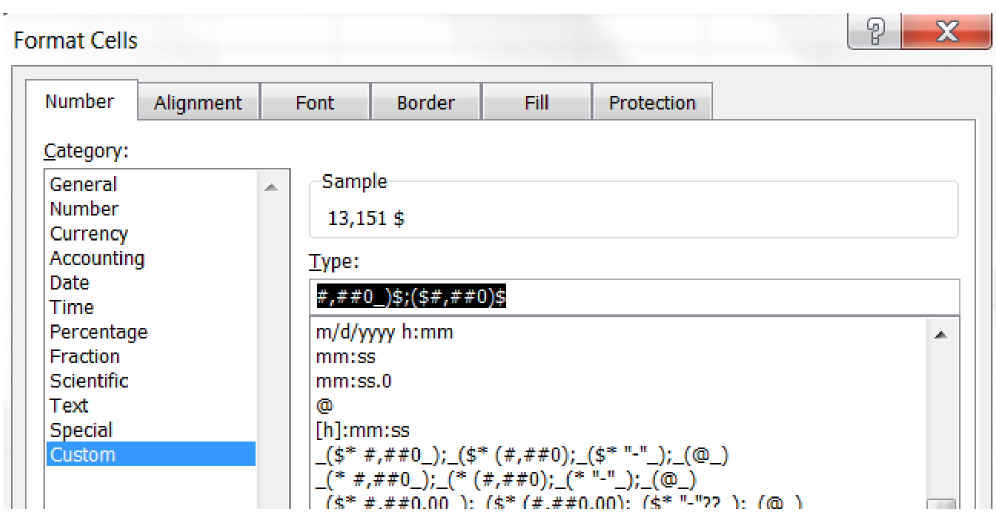
Detail Model 2016-2020 Base Plan		Formula-Forecast	Jan 2016	Feb 2016	Mar 2016
CHI 4.50% FMB due May 15, 2015					
Principal Outstanding	(Format - Default Data Format)	Input()	150,000,000	150,000,000	150,000,000
Planning Entity	(Format - Object Description)	Association To(Planning Entity)	Chicago Gas	Chicago Gas	Chicago Gas
New Issue Principal	(Format - Dollar $#,####)	Attribute(New Issue Principal)	$150,000,000	$150,000,0...	$150,000,0...
Variable Interest Rate	(Format - Percent #,##0.00%)	Input()	0.42%	0.42%	0.42%
Issue Date YYYYMM	(Format - MM YYYY)	Attribute(Issue Date (yyyymm))	Aug 2002	Aug 2002	Aug 2002
Interest Payable	(Format - #,##0.000)	Previous(DU:[Interest Payable])	3,480.556	563.889	1,147.222
New Issue Cost Percent	(Format - #,##0.0000%)	Input()	0.3333%	0.3333%	0.3333%
Issue Day (1-30)	(Format - ###0)	Attribute(Issue Day)	15	15	15
Year	(Format - ###0)	Current Year()	2016	2016	2016

The default data format is a user preference and is set on the Report Labels tab. The format chosen here will be applied to all cells using the default data format.

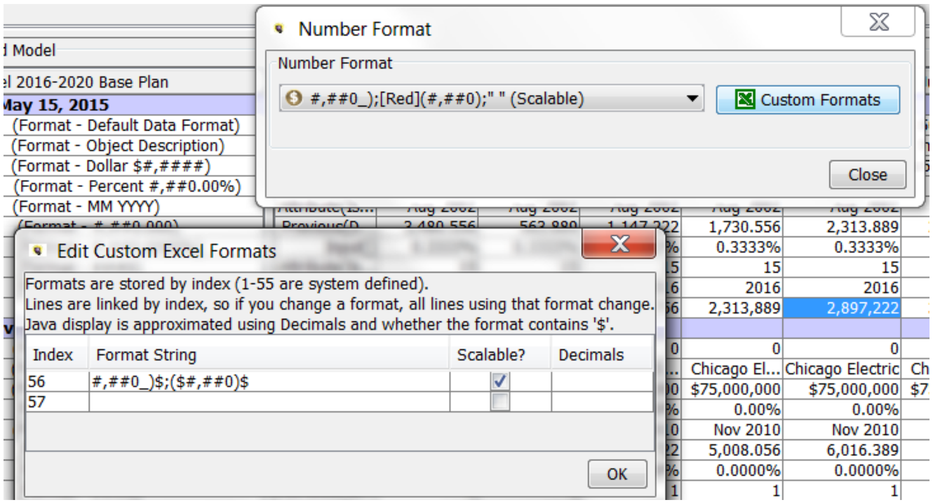


Custom Excel Formats

Users can create custom Excel formats. First, create the desired format in Excel, and copy the format string to the clip-board.



Then in the Format Report tab, select the desired cell and choose the Custom Formats button. This will bring up a dialog box. Copy the Excel format to the clipboard and paste it into the Format String textbox. Decide whether it is scalable or not, as well as the number of decimal places. Upon hitting OK, the new custom format will be saved and available to apply.

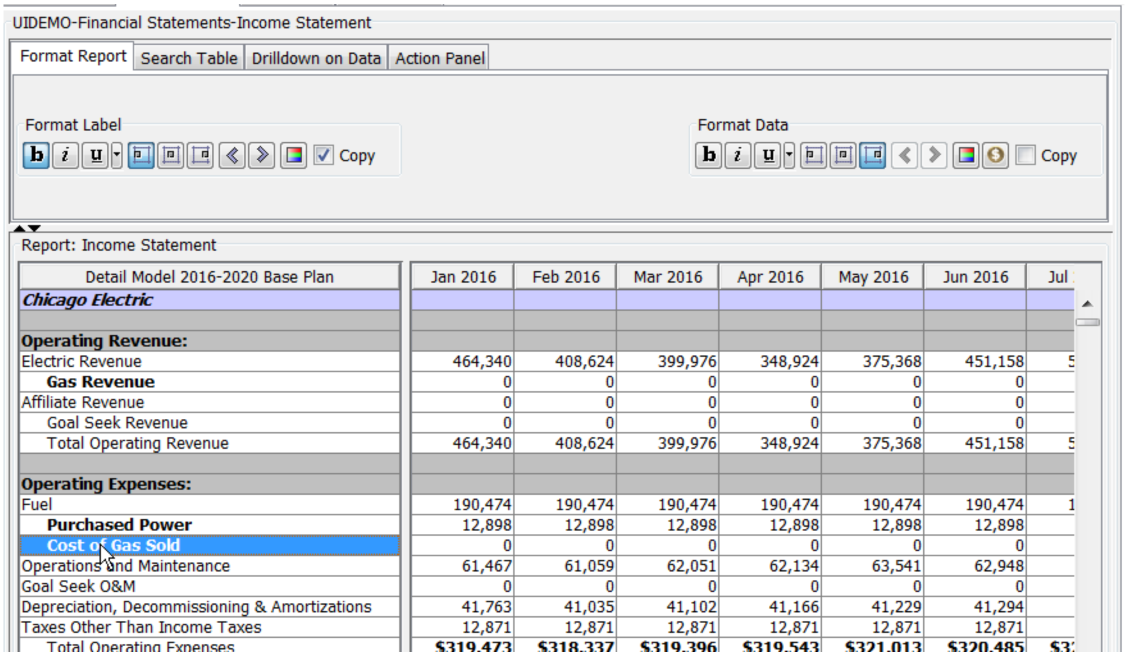


Note that custom formats are not visible in Browse Reports, but only upon export to Excel.

Detail Model 2016-2020 Base Plan	Formula-Forecast	Jan 2016	Feb 2016	Mar 2016
Interest Payable	H:[Interest Payable	563,889 $	1,147,222 $	1,730,556 $

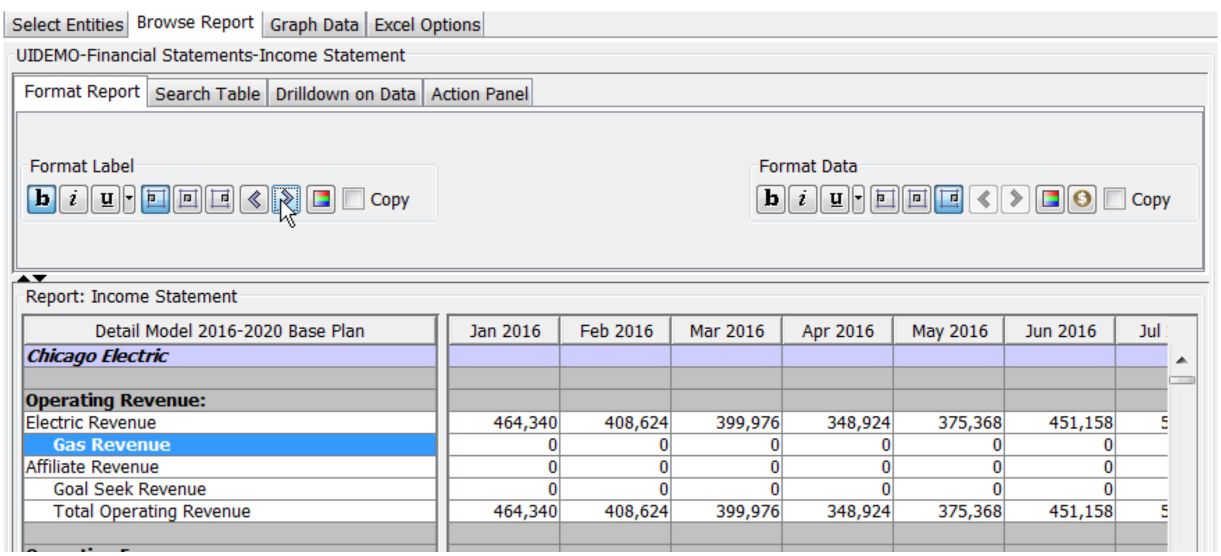
Copying Line Formats

To copy formatting from one line to another, select the line to copy from, and select the Copy checkbox. Then each line selected will get that formatting. When done, be sure to uncheck the Copy checkbox. Otherwise, every line selected from then on will be formatted.

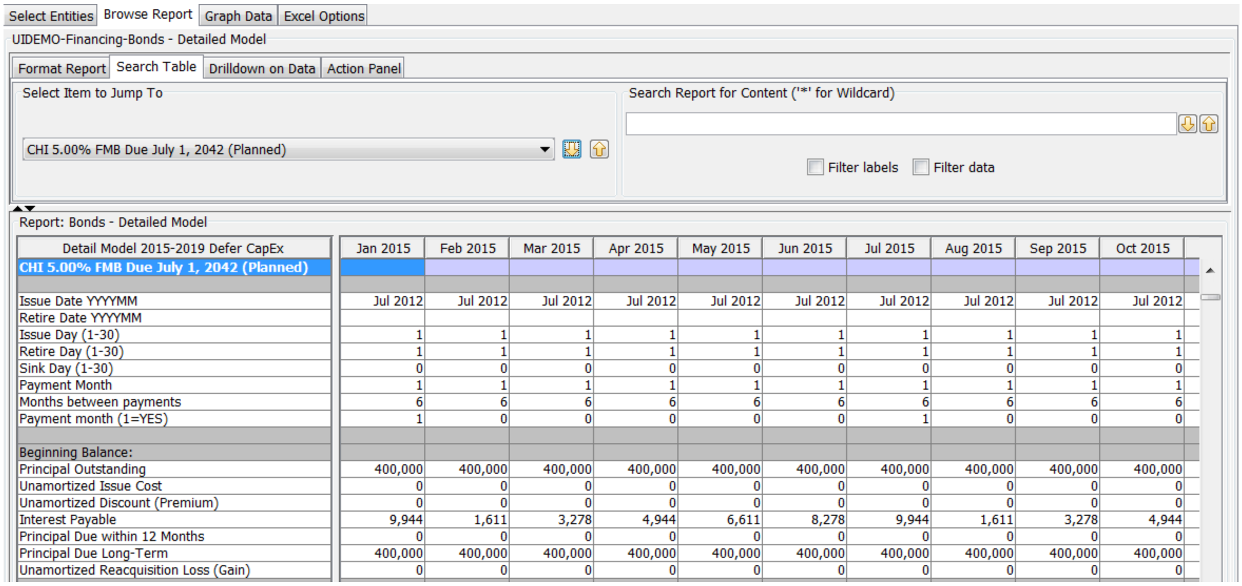


Formatting Labels

To format a label line, select it and use the Format Label buttons. Below is an example.



Report Options - Search Table Tab

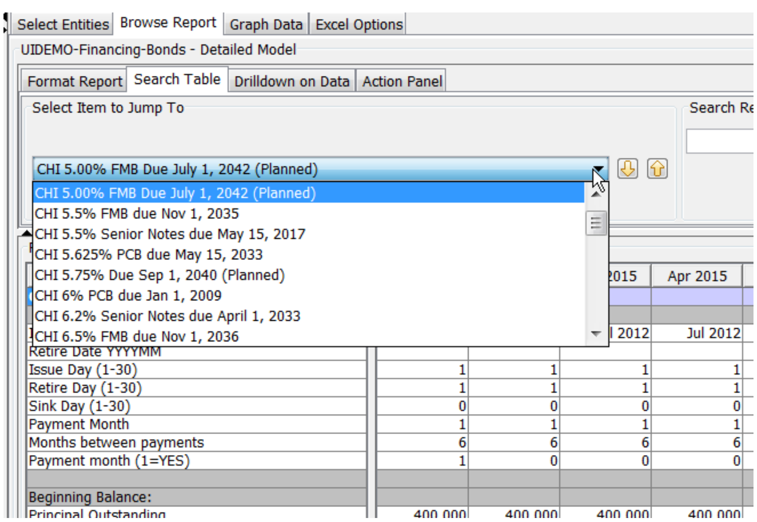


Detail Model 2015-2019 Defer CapEx	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Oct 2015
CHI 5.00% FMB Due July 1, 2042 (Planned)										
Issue Date YYYYMM	Jul 2012	Jul 2012	Jul 2012	Jul 2012	Jul 2012	Jul 2012	Jul 2012	Jul 2012	Jul 2012	Jul 2012
Retire Date YYYYMM										
Issue Day (1-30)	1	1	1	1	1	1	1	1	1	1
Retire Day (1-30)	1	1	1	1	1	1	1	1	1	1
Sink Day (1-30)	0	0	0	0	0	0	0	0	0	0
Payment Month	1	1	1	1	1	1	1	1	1	1
Months between payments	6	6	6	6	6	6	6	6	6	6
Payment month (1=YES)	1	0	0	0	0	0	1	0	0	0
Beginning Balance:										
Principal Outstanding	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Unamortized Issue Cost	0	0	0	0	0	0	0	0	0	0
Unamortized Discount (Premium)	0	0	0	0	0	0	0	0	0	0
Interest Payable	9,944	1,611	3,278	4,944	6,611	8,278	9,944	1,611	3,278	4,944
Principal Due within 12 Months	0	0	0	0	0	0	0	0	0	0
Principal Due Long-Term	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Unamortized Reacquisition Loss (Gain)	0	0	0	0	0	0	0	0	0	0

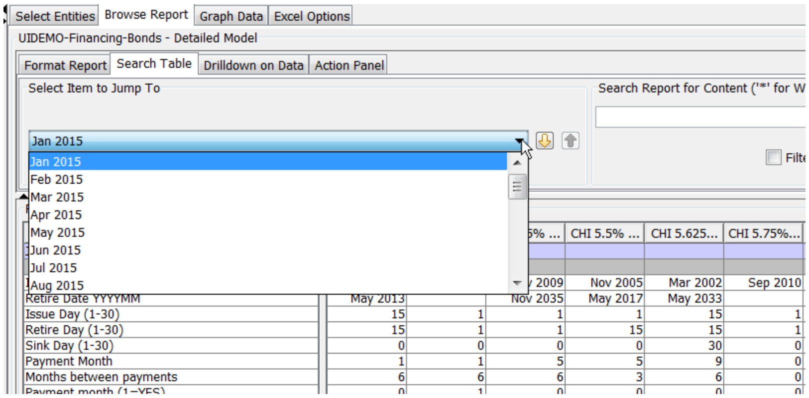
When the Search Table sub tab is selected, the selected report is displayed at the bottom, and two regions appear across the top to allow searching the report.

Select Item to Jump To

Select an entity from the drop-down list and the report display will move to that entity. The arrows to the right will move the report display to the next entity up or down in the list.

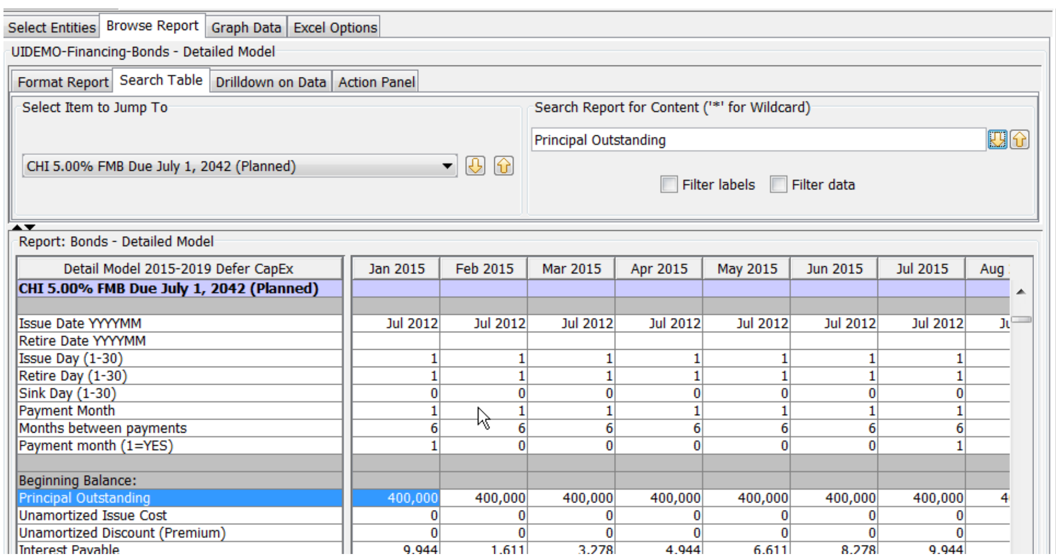


Note that the Jump to Item also works in Entities Across – the items listed will be the Time Periods.

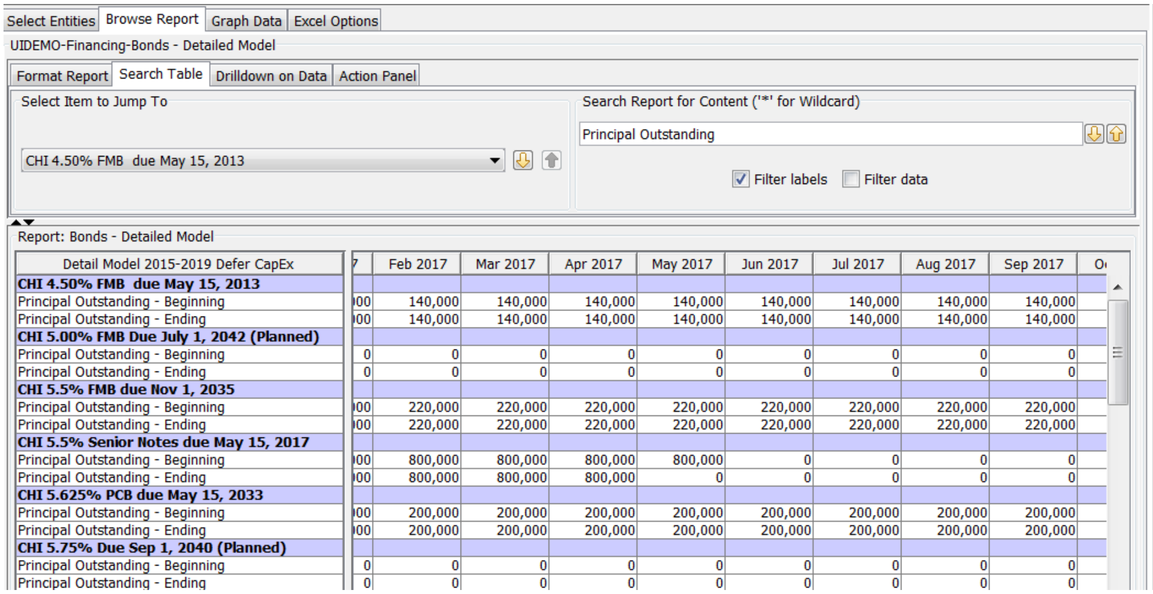


Search Report for Content

Enter text into the box provided. Select the up and down arrows to search the report for this text string. This feature will work for text in line labels as well as formatted numbers

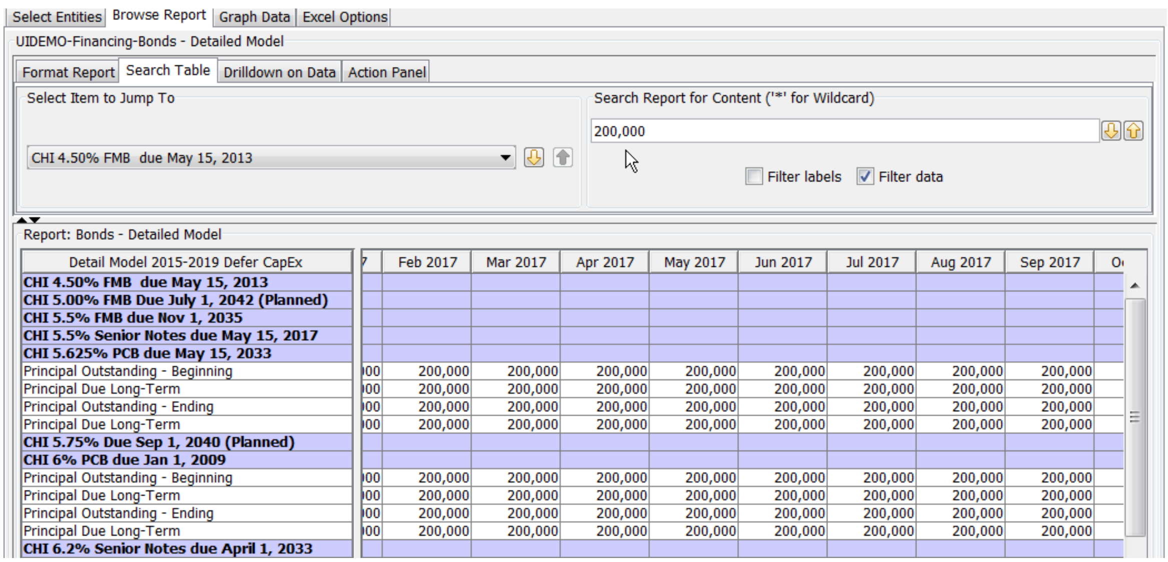


Once search text has been entered, the two Filter checkboxes provide an alternative to jumping from item or item. Selecting these checkboxes will filter all lines containing the search text.



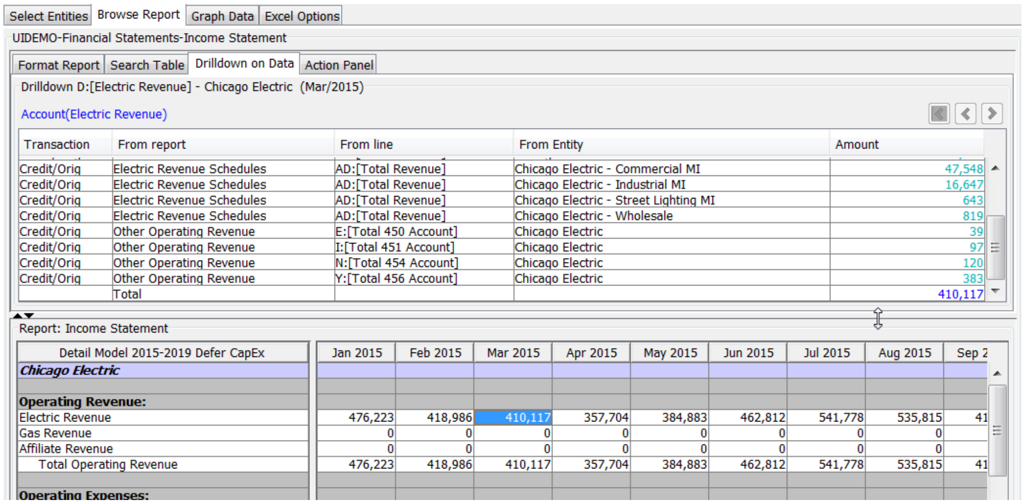
Detail Model 2015-2019 Defer CapEx	7	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	O
CHI 4.50% FMB due May 15, 2013										
Principal Outstanding - Beginning	00	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	
Principal Outstanding - Ending	00	140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	
CHI 5.00% FMB Due July 1, 2042 (Planned)										
Principal Outstanding - Beginning	0	0	0	0	0	0	0	0	0	
Principal Outstanding - Ending	0	0	0	0	0	0	0	0	0	
CHI 5.5% FMB due Nov 1, 2035										
Principal Outstanding - Beginning	00	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	
Principal Outstanding - Ending	00	220,000	220,000	220,000	220,000	220,000	220,000	220,000	220,000	
CHI 5.5% Senior Notes due May 15, 2017										
Principal Outstanding - Beginning	00	800,000	800,000	800,000	800,000	0	0	0	0	
Principal Outstanding - Ending	00	800,000	800,000	800,000	0	0	0	0	0	
CHI 5.625% PCB due May 15, 2033										
Principal Outstanding - Beginning	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
Principal Outstanding - Ending	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
CHI 5.75% Due Sep 1, 2040 (Planned)										
Principal Outstanding - Beginning	0	0	0	0	0	0	0	0	0	
Principal Outstanding - Ending	0	0	0	0	0	0	0	0	0	

The Filter Data checkbox searches for the entered text in the data cells.



Detail Model 2015-2019 Defer CapEx	7	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	O
CHI 4.50% FMB due May 15, 2013										
CHI 5.00% FMB Due July 1, 2042 (Planned)										
CHI 5.5% FMB due Nov 1, 2035										
CHI 5.5% Senior Notes due May 15, 2017										
CHI 5.625% PCB due May 15, 2033										
Principal Outstanding - Beginning	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
Principal Due Long-Term	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
Principal Outstanding - Ending	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
Principal Due Long-Term	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
CHI 5.75% Due Sep 1, 2040 (Planned)										
CHI 6% PCB due Jan 1, 2009										
Principal Outstanding - Beginning	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
Principal Due Long-Term	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
Principal Outstanding - Ending	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
Principal Due Long-Term	00	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
CHI 6.2% Senior Notes due April 1, 2033										

Report Options - Drilldown on Data Tab



When the Drilldown on Data sub tab is selected, an active report is displayed at the bottom. The panel displayed at the top of the sub tab displays the drilldown data. Key features of UIPlanner drilldown include the following:

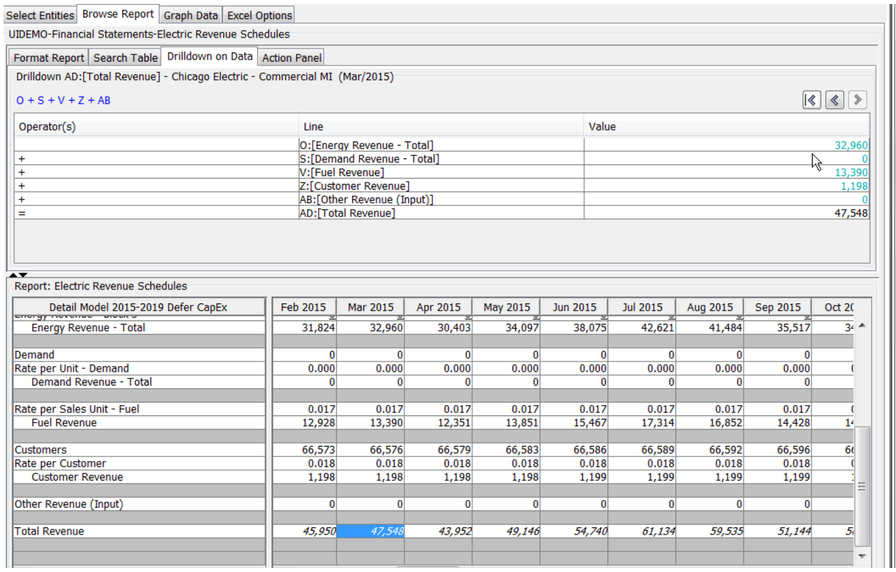
- Move to any data cell on the active report and the drill down panel will display the underlying source data for that cell. Click on the highlighted number to drill to its source (formula, account, or another report). Drill down will continue from report to report.
- Drill-down is also available for consolidation points for planning entities.
- When the drill-down ends at an input number, it will show the user id and time/date. It will also show any cases and the final winner amount.
- Drilldown is also available on Scenario Compares (see Compare Scenarios)

These are described in greater detail below.

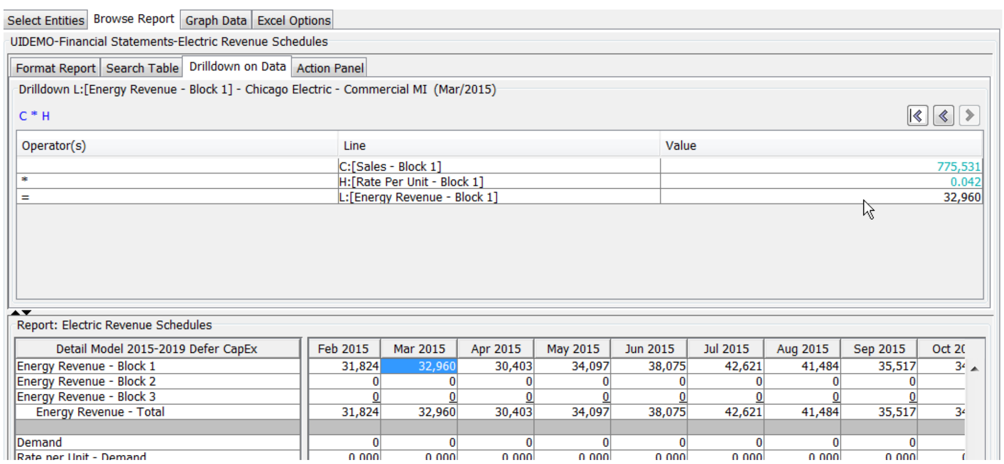
Note – if a scenario was read back from published results, drilldown is not available on data sourced from multidimensional datasets.

Drilldown Path

Data drill down is available for every data cell in the report, and the user can drill through multiple levels, all the way to the input data. At each level, the user can click on another cell to drill further into the data. Note that at this level, the drilldown has jumped to the source report – Electric Revenue Schedules. The drilldown now shows the source line as well as its components.



The user can continue the drilldown by clicking on drillable (blue) cells. At any level, the user can move forward or back a step by using the < or > buttons. Or, if desired, jump back to the first report with the Back to Beginning arrow.

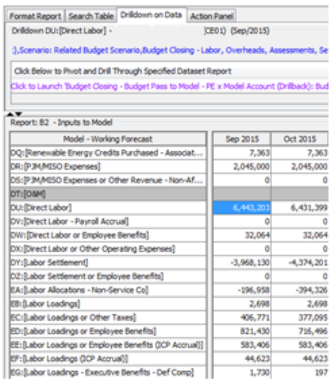


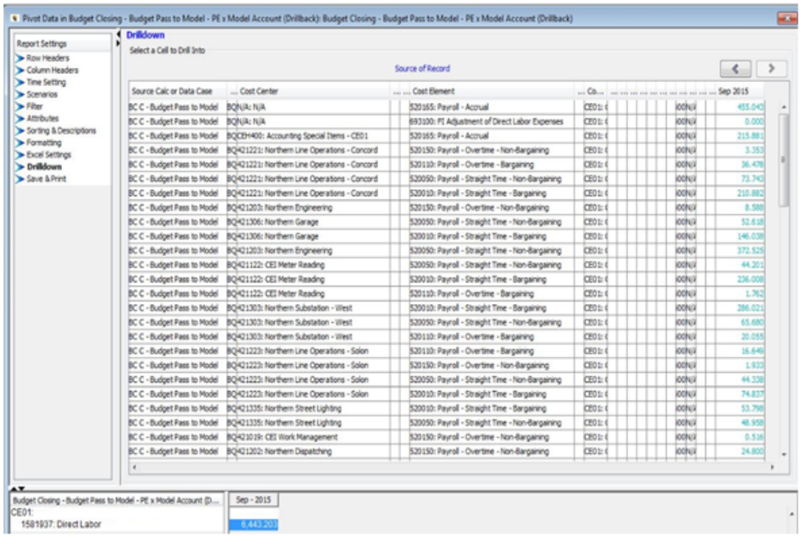
Drilldown into Multidimensional Data

If an amount in a model report was sourced from a published multidimensional dataset or from data that was pushed to the model using the B2 to Ledger task function, drilldown is available over into the multidimensional side.

Published Dataset

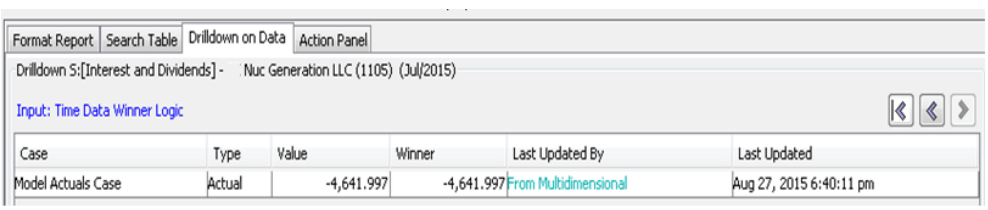
The cell in the Model report will list the source report. When the user clicks on the cell, UIPlanner will launch the underlying report in the multidimensional side, in the Pivot Reporting screen. The user can then continue drilling, in Pivot Reports.

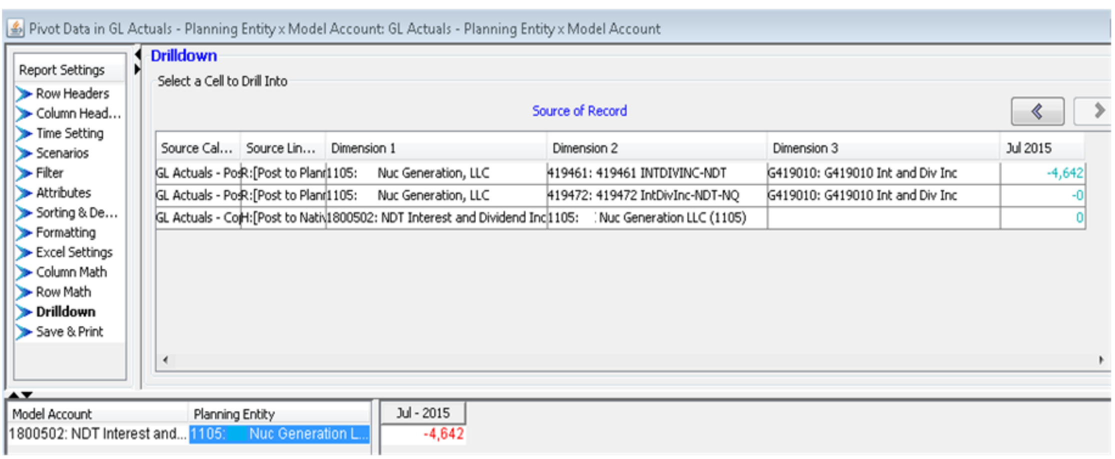




Ledger Actuals

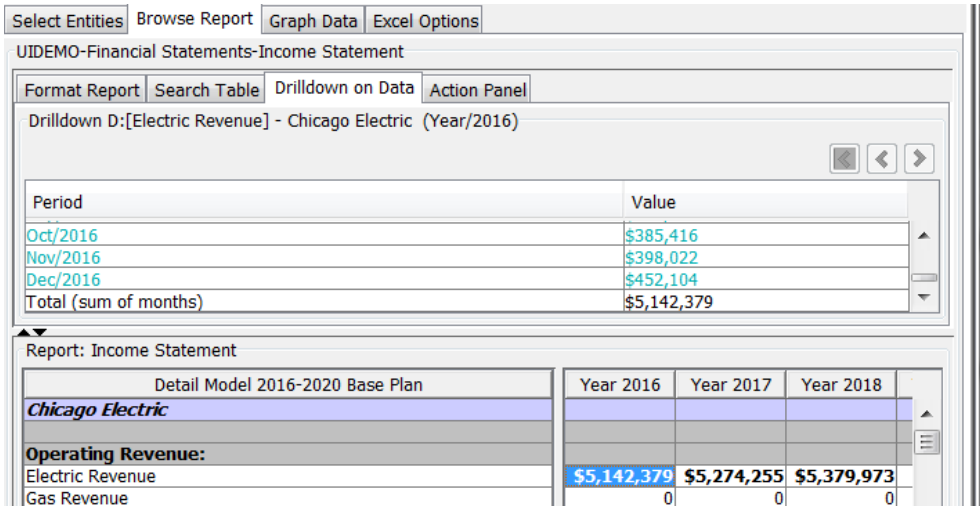
The cell in the model report will give the amount, and the source will be listed as From Multidimensional. When the user clicks on that text, UIPlanner will open that dataset.





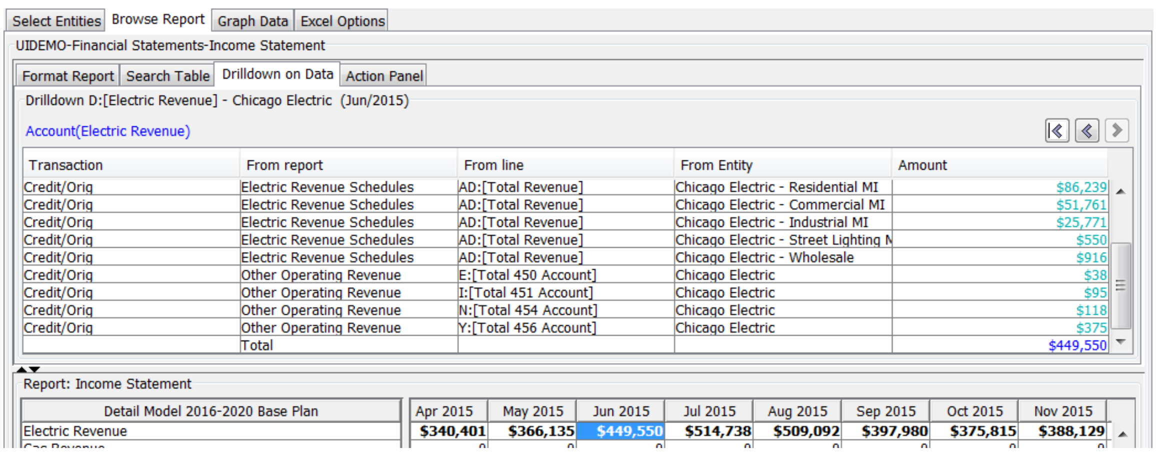
Drilldown on Annual Amounts

Drilldown is not possible into annual amounts. When drilling in on annual amounts (e.g., Income Statement or Balance Sheet), the drilldown will show the individual month for the next step.



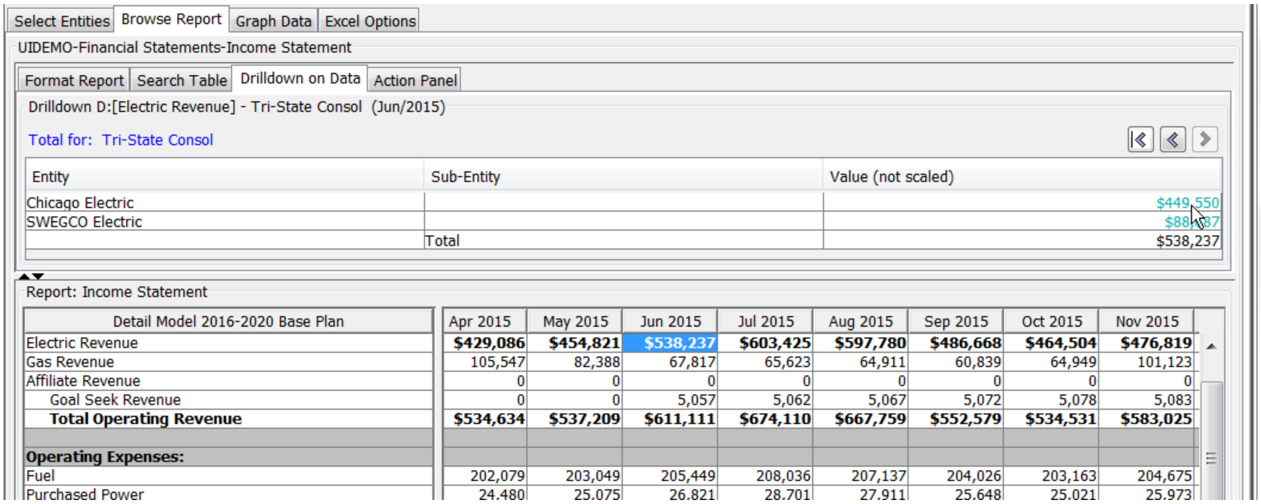
Drilldown on Account Values

When drilling in on account values (e.g., Income Statement or Balance Sheet), the drilldown shows the actual postings that generated the value.

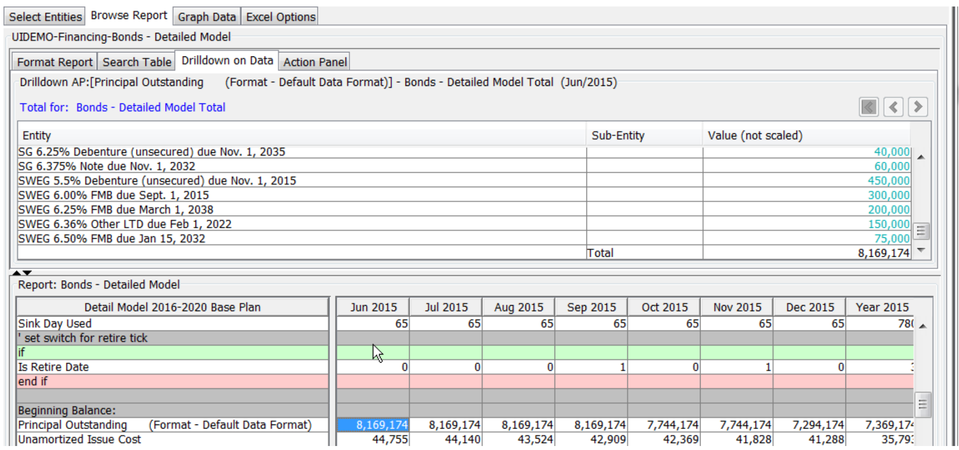


Drilldown on Consolidated Nodes/Total

When drilling on a Consolidated node, the drilldown will show the constituent entities. The user can then drill on the desired one.

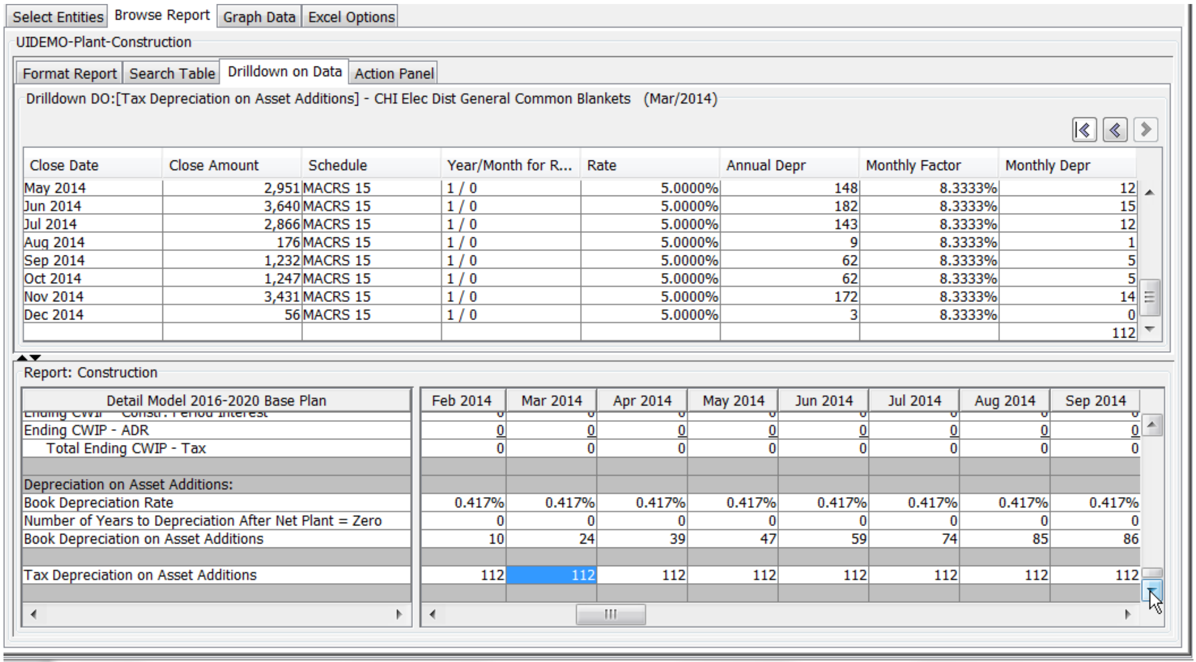


When drilling in on a report showing Totals, the drilldown also shows the entities that make up the total.



Drilldown Information – Functions

When the user drills down on a cell that is the result of a function or an averaging process, the drilldown shows the supporting calculation.



Select Entities | Browse Report | Graph Data | Excel Options

UIDEMO-Plant-Construction

Format Report | Search Table | Drilldown on Data | Action Panel

Drilldown DO:[Tax Depreciation on Asset Additions] - CHI Elec Dist General Common Blankets (Mar/2014)

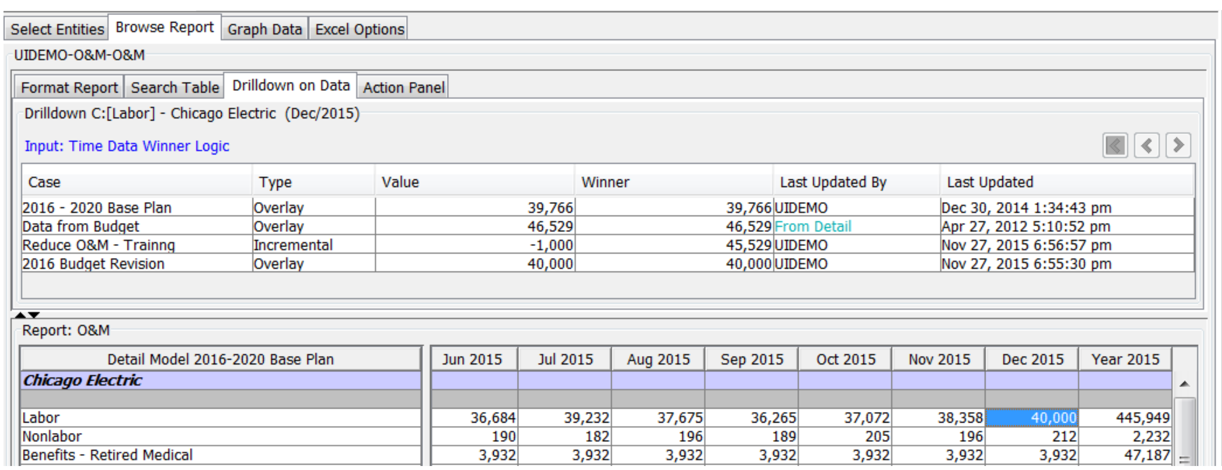
Close Date	Close Amount	Schedule	Year/Month for R...	Rate	Annual Depr	Monthly Factor	Monthly Depr
May 2014	2,951	MACRS 15	1 / 0	5.0000%	148	8.3333%	12
Jun 2014	3,640	MACRS 15	1 / 0	5.0000%	182	8.3333%	15
Jul 2014	2,866	MACRS 15	1 / 0	5.0000%	143	8.3333%	12
Aug 2014	176	MACRS 15	1 / 0	5.0000%	9	8.3333%	1
Sep 2014	1,232	MACRS 15	1 / 0	5.0000%	62	8.3333%	5
Oct 2014	1,247	MACRS 15	1 / 0	5.0000%	62	8.3333%	5
Nov 2014	3,431	MACRS 15	1 / 0	5.0000%	172	8.3333%	14
Dec 2014	56	MACRS 15	1 / 0	5.0000%	3	8.3333%	0
							112

Report: Construction

Detail Model 2016-2020 Base Plan	Feb 2014	Mar 2014	Apr 2014	May 2014	Jun 2014	Jul 2014	Aug 2014	Sep 2014
Ending CWIP - Constr. Period Interest	0	0	0	0	0	0	0	0
Ending CWIP - ADR	0	0	0	0	0	0	0	0
Total Ending CWIP - Tax	0	0	0	0	0	0	0	0
Depreciation on Asset Additions:								
Book Depreciation Rate	0.417%	0.417%	0.417%	0.417%	0.417%	0.417%	0.417%	0.417%
Number of Years to Depreciation After Net Plant = Zero	0	0	0	0	0	0	0	0
Book Depreciation on Asset Additions	10	24	39	47	59	74	85	86
Tax Depreciation on Asset Additions	112	112	112	112	112	112	112	112

Drilldown Information – Input Data

When the drilldown path ends at input data, the drilldown display will show the User ID and time/date of the entry. All cases are shown, with the winner logic laid out.



Select Entities | Browse Report | Graph Data | Excel Options

UIDEMO-O&M-O&M

Format Report | Search Table | Drilldown on Data | Action Panel

Drilldown C:[Labor] - Chicago Electric (Dec/2015)

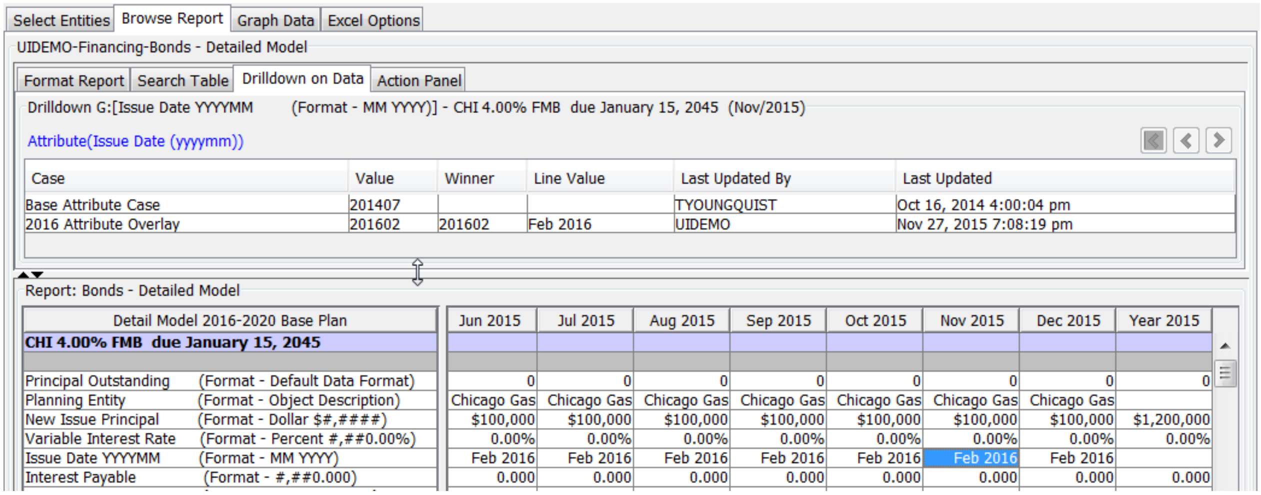
Input: Time Data Winner Logic

Case	Type	Value	Winner	Last Updated By	Last Updated
2016 - 2020 Base Plan	Overlay	39,766	39,766	UIDEMO	Dec 30, 2014 1:34:43 pm
Data from Budget	Overlay	46,529	46,529	From Detail	Apr 27, 2012 5:10:52 pm
Reduce O&M - Trainng	Incremental	-1,000	45,529	UIDEMO	Nov 27, 2015 6:56:57 pm
2016 Budget Revision	Overlay	40,000	40,000	UIDEMO	Nov 27, 2015 6:55:30 pm

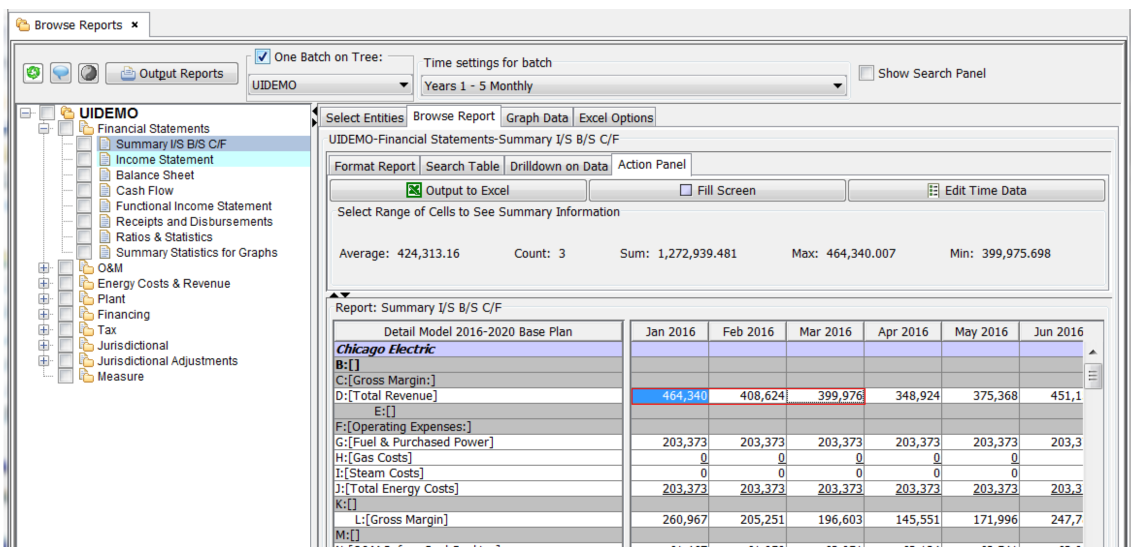
Report: O&M

Detail Model 2016-2020 Base Plan	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Year 2015
Chicago Electric								
Labor	36,684	39,232	37,675	36,265	37,072	38,358	40,000	445,949
Nonlabor	190	182	196	189	205	196	212	2,232
Benefits - Retired Medical	3,932	3,932	3,932	3,932	3,932	3,932	3,932	47,187

The detailed drilldown information and winner logic also applies when the drilldown is on attributes.



Report Options - Action Panel Tab



The Action Panel tab still shows the report results below, but has three action buttons

- Output to Excel - Exports the active report to Excel. See UIPlanner Excel Reports
- Fill Screen - removes the frame around the report and displays the report across your full screen.
- Edit Time Data - opens the Edit Time Data screen for the chosen report.

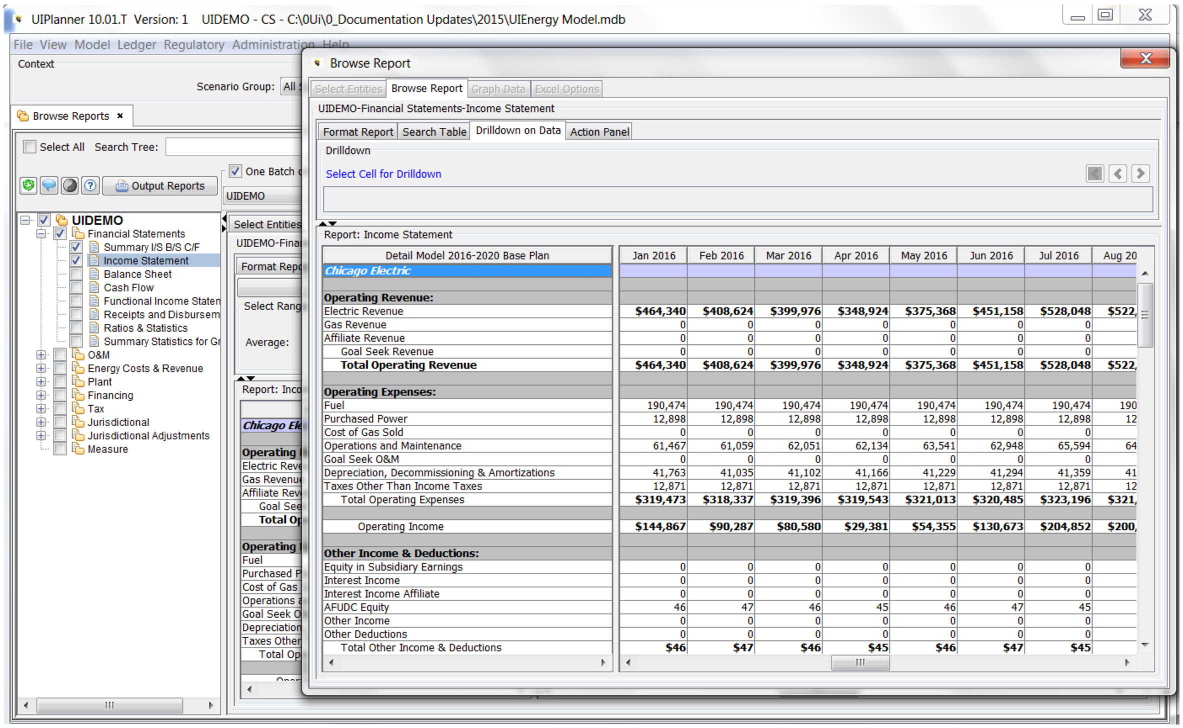
The Action Panel tab also allows the user to do ad hoc summation of selected cells, akin to MS Excel.

Output to Excel

When this button is selected, the selected report will be exported to MS Excel. See UIPlanner Model Excel Reports for more information.

Fill Screen

Selecting this button will open the selected report in a modal window. This provides the user much more screen real estate. Note that the report still has all of the same functionality – format, drilldown and search.



To close the full screen view and return to the main Browse Reports screen, either select xxx or hit the red 'X' in the corner.

Edit Time Data

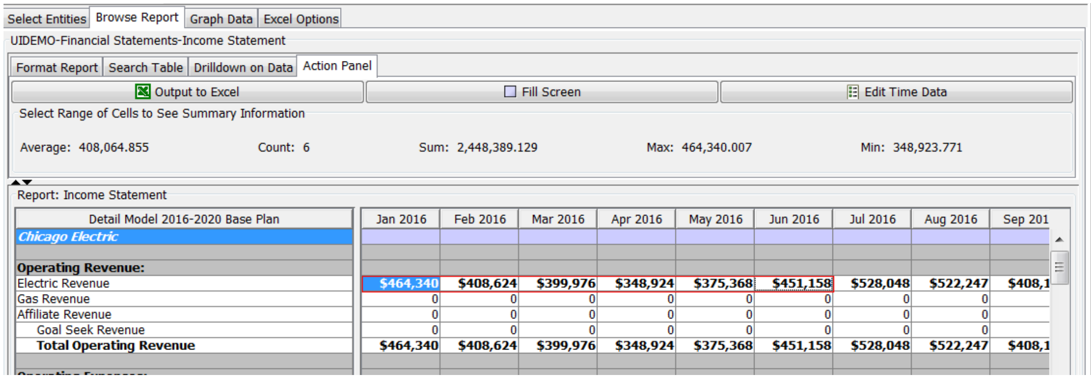
The Edit Time Data button opens the Time Data Editor for the current report.

Summary Information

The Action Panel allows the user to select a range of cells in the active report to see:

- Average value
- Sum of the values
- Count of values

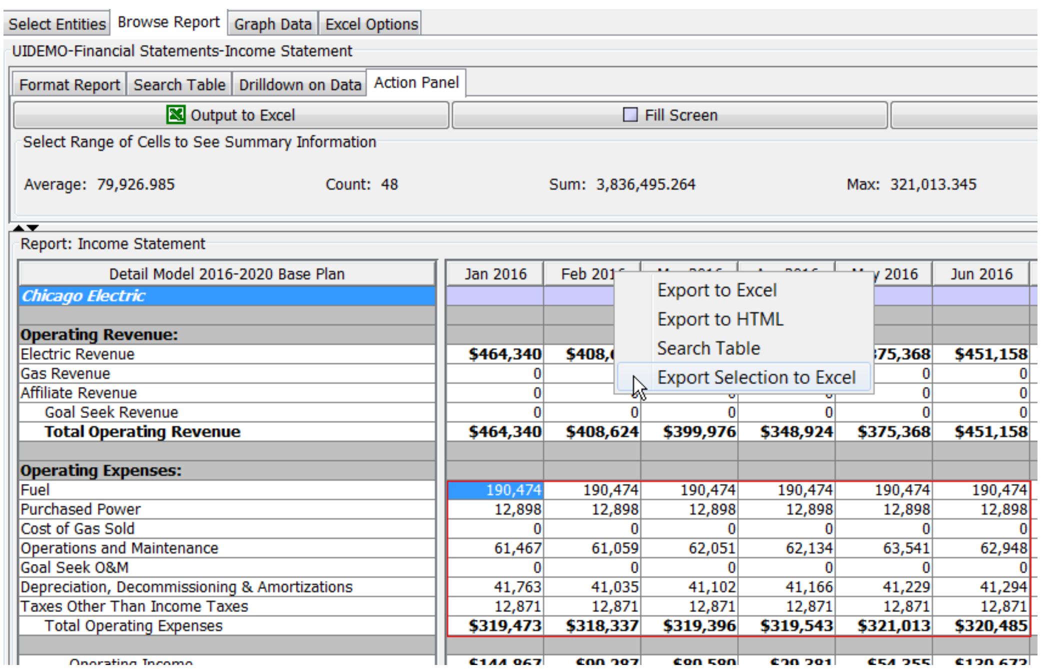
- Maximum value
- Minimum value



This feature supports multi-select, using the <ctrl> key.

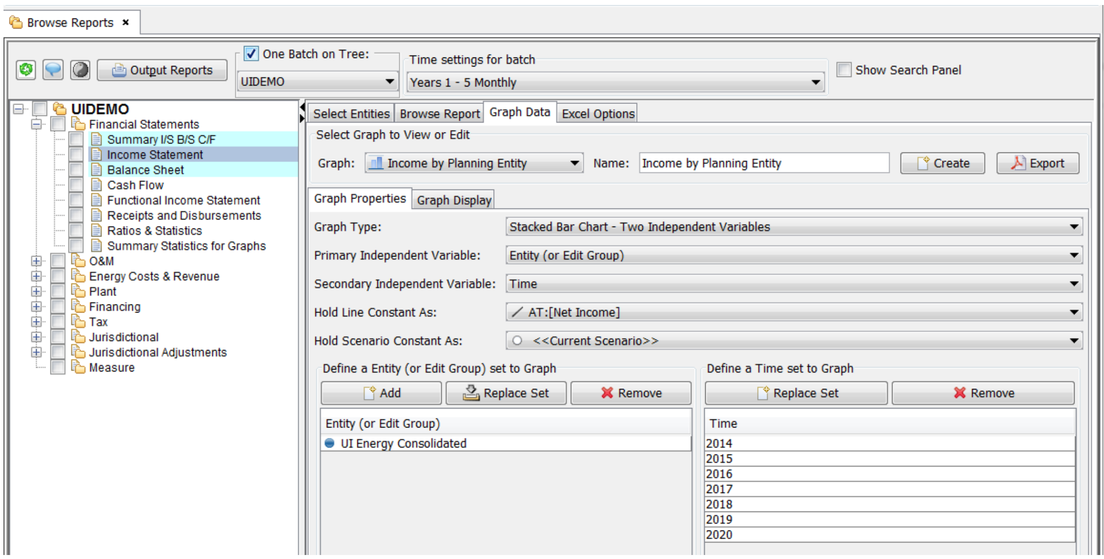
Export Selection to Excel

In addition to the Output to Excel button (which sends the entire report to Excel), the user can send only a selected range of cells to Excel. Highlight a range, then right-click on the header row of the report display. Selecting the Export Selection to Excel will send just those cells to Excel.



A	B	C	D	E	F	G
	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016
Fuel	190,474.41	190,474.41	190,474.41	190,474.41	190,474.41	190,474.41
Purchased Power	12,898.13	12,898.13	12,898.13	12,898.13	12,898.13	12,898.13
Cost of Gas Sold	.00	.00	.00	.00	.00	.00
Operations and Maintenance	61,467.13	61,058.90	62,051.10	62,133.59	63,541.04	62,947.96
Goal Seek O&M	.00	.00	.00	.00	.00	.00
Depreciation, Decommissioning & Amortizations	41,762.66	41,034.60	41,101.51	41,166.04	41,228.88	41,293.66
Taxes Other Than Income Taxes	12,870.89	12,870.89	12,870.89	12,870.89	12,870.89	12,870.89
Total Operating Expenses	319,473.22	318,336.93	319,396.04	319,543.06	321,013.35	320,485.05

Report Options - Graph Data Tab



The Graph Data tab on the Browse Reports screen is a graphing engine that links graphs with reports. Users can graph the lines and entities on a selected report (over any time dimension) and build multiple graphs from any report. The graphing engine supports drilldown from graphs into the supporting detail reports.

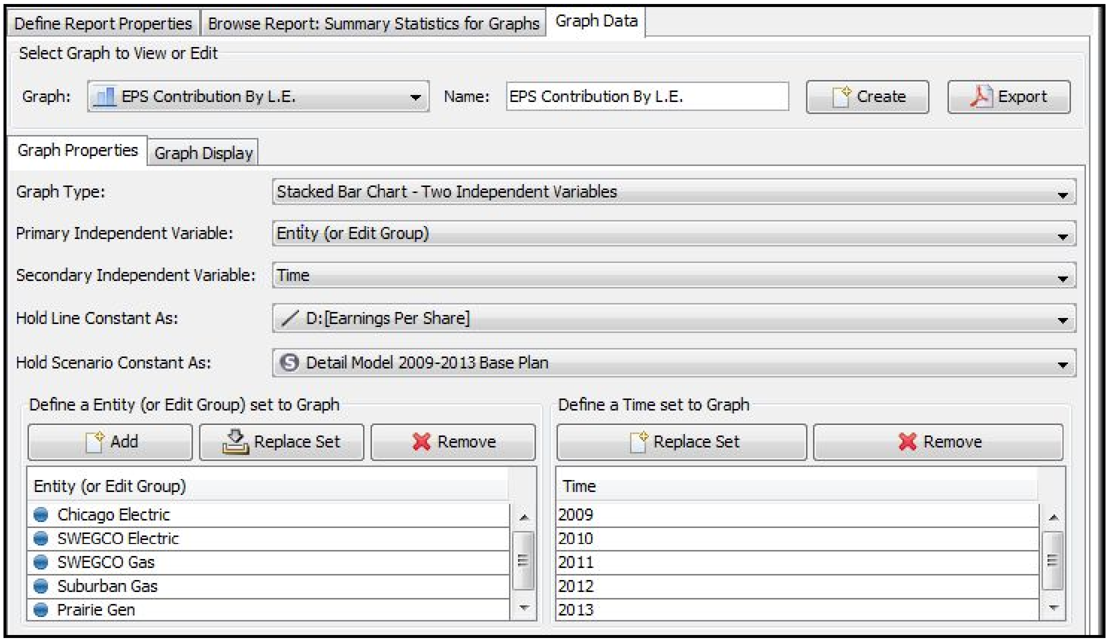
The top section of the Graph Data tab has a dropdown list to select from existing graphs, as well as two action buttons

- Create - used to create and save new Graph settings
- Export – Exports the current graph in .pdf format

Below that there are two sub tabs in the main region:

- Graph Properties – Used to change the entities or aggregate them or to change the time ranges.
- Graph Display – Shows the completed graph.

Graph Properties Tab



The Graph Properties sub tab is divided into three regions:

Series of drop-down lists

- Graph Type – select type of graph.
- Primary Independent Variable – select Entity (or Edit Group), Line, Time or Scenario.
- Secondary Independent Variable – select Entity (or Edit Group), Line, Time or Scenario.
- Hold Line Constant As – select a line.
- Hold Scenario Constant As – select a scenario.

Define an Entity (or Edit Group) to Graph

- Add - click to add an Entity (or Edit Group). Select from the list.
- Replace Set - click to replace a set of entities (or edit groups).
- Remove - click to remove an Entity (or Edit Group).

Define a Time Set to Graph

- Replace Set - click to replace a time range.
- Remove - click to remove a time range.

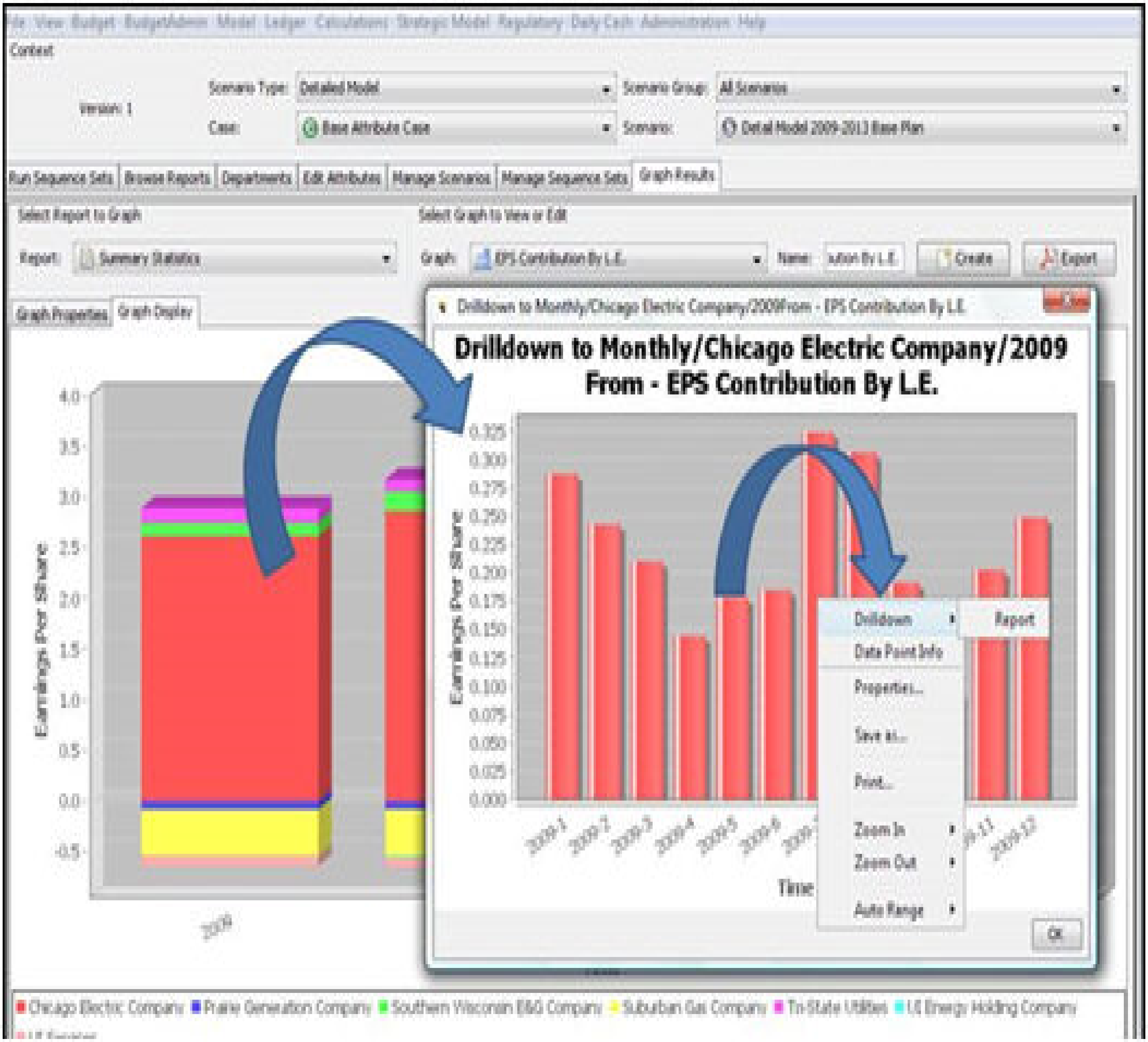
Graph Display Tab

Click the sub tab to run the graph.. Right-click on the graph to select one of the following options:

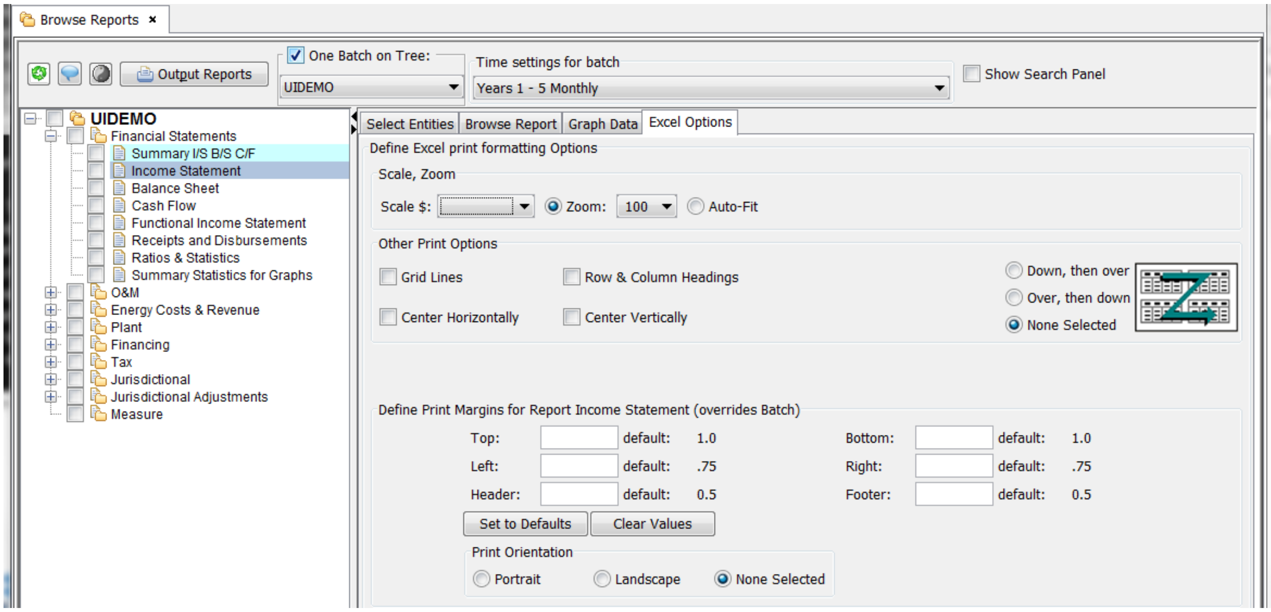
- Drilldown – monthly or quarterly
- Data Point Info – view the data value along with associated items elected in the top region of the tab, e.g., scenario, Entity (or Edit Group), time, etc.
- Properties – view chart properties such as font, color, etc.
- Save as.. – save to a graphics file.
- Print
- Zoom In
- Zoom Out

Auto range – automatically set the range, domain or both axes.

Right-click on a data point on the graph to launch drilldown (see example below).



Report Options - Excel Options Tab



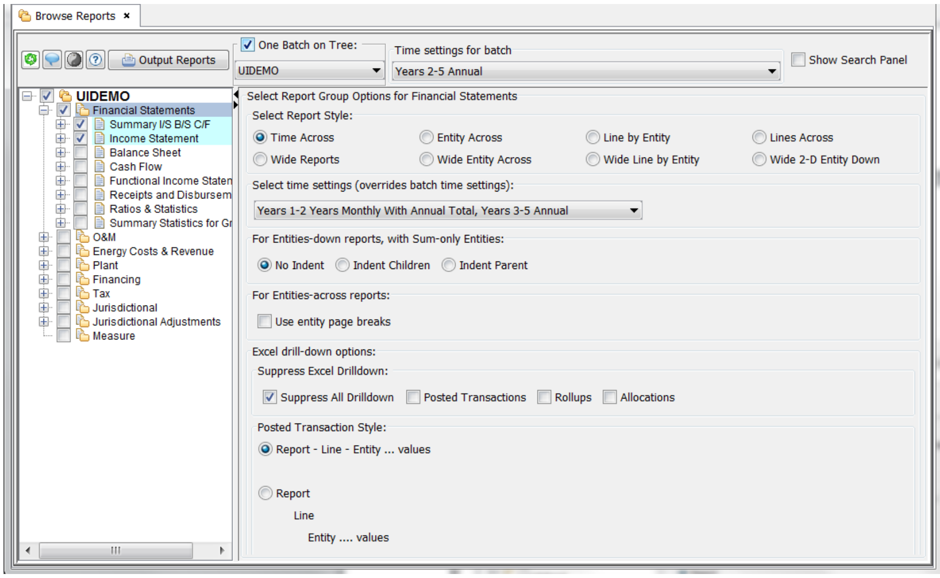
The primary function of the Excel Options Tab of the Browse Reports screen is to set various settings for the selected report when it is exported to Excel. However, there is one setting on this screen that also impacts the on-screen display.

Scale $ - this droplist allows the user to define dollar scaling for the report (dollars, $000, millions). This setting will override the setting at the Batch level.

The other settings on the screen all control the Excel output. These override any settings made at the Batch level.

- Zoom - Sets the zoom percent in Excel
- Auto-fit - Auto-fits the column widths to fit one page
- Grid Lines – turn on gridlines in Excel
- Row and Column Headings – turns on Excel row and column headings
- Center Horizontally – centers the report horizontally
- Center Vertically – centers the report vertically
- Print order – these radio buttons allow the user to define the print order. Down then Over, Over then Down, or no selection.
- Print Margins – these allow the user to set the margins (top, bottom, left, right, header and footer). These are set in inches, with the defaults indicated. There are buttons to a) clear all settings and b) to set them to the default values.
- Print Orientation – Portrait, Landscape or none selected.

Report Group Options



The Report Group Options Tab controls two facets of Browse Reports:

- Organization and Display – how the reports will appear in Browse Reports, i.e. whether time is across the columns and entities down as lines, or entities across the top and time down, etc.
- Excel Drill-down – whether or not supporting detail for lines in the reports are sent to Excel when the report(s) are output.

These settings apply to all of the reports within a Report Group. Thus, within a batch, users can apply different settings to different groups of reports, e.g., the Financial Statements report group may be Entities Across while other Report Groups may be time across.

Report Style

UIPlanner reports can be displayed in a number of different styles.

- Time Across – displays monthly or annual data across the top in columns, with entities down. This is the most commonly used report style.
- Entity Across – displays each entity in columns, with time going down.
- Line by Entity - displays each line in the report followed by entities, with time across the report in columns. If there is only one entity selected, the report automatically switches to the “time across” format.

- Lines Across – displays report lines across the top in columns.
- Wide Report – links reports that are related and displays those reports (that are in a “wide” report group) together in one display
- Wide Entity Across – displays a wide report with each entity in a column, with time going down
- Wide Line by Entity – displays a wide report in line by entity format
- Wide 2-D Entity Down – for a wide report that contains a 2-D report, this displays it with the entities down.

Below are examples of each report style.

Time Across

Report: Summary I/S B/S C/F

Detail Model 2016-2020 Base Plan	Year 2015	Year 2016	Year 2017	Year 2018
Chicago Electric				
Gross Margin:				
Total Revenue	5,024,157	5,142,379	5,662,646	6,056,365
Operating Expenses:				
Fuel & Purchased Power	2,369,389	2,440,470	2,513,685	2,589,095
Gas Costs	0	0	0	0
Steam Costs	0	0	0	0
Total Energy Costs	2,369,389	2,440,470	2,513,685	2,589,095
Gross Margin	2,654,768	2,701,909	3,148,961	3,467,270

Entity Across

Report: Summary I/S B/S C/F

Detail Model 2016-2020 Base Plan	Chicago Electric	Chicago Gas	Chicago Nonutility	SWEGCO Electric
Year 2015				
Gross Margin:				
Total Revenue	5,024,157	482,549	0	1,064,243
Operating Expenses:				
Fuel & Purchased Power	2,369,389	0	0	405,654
Gas Costs	0	0	0	0
Steam Costs	0	0	0	0
Total Energy Costs	2,369,389	0	0	405,654
Gross Margin	2,654,768	482,549	0	658,589

Line by Entity

Report: Summary I/S B/S C/F

Detail Model 2016-2020 Base Plan	Year 2015	Year 2016	Year 2017	Year 2018
Total Revenue				
Chicago Electric	5,024,157	5,142,379	5,662,646	6,056,365
Chicago Gas	482,549	547,602	616,963	646,657
Chicago Nonutility	0	0	0	0
SWEGCO Electric	1,064,243	1,096,033	1,128,775	1,162,586
Total Energy Costs				
Chicago Electric	2,369,389	2,440,470	2,513,685	2,589,095
Chicago Gas	0	0	0	0
Chicago Nonutility	0	0	0	0
SWEGCO Electric	405,654	414,941	423,601	432,451
Gross Margin				
Chicago Electric	2,654,768	2,701,909	3,148,961	3,467,270
Chicago Gas	482,549	547,602	616,963	646,657
Chicago Nonutility	0	0	0	0
SWEGCO Electric	658,589	681,093	705,174	730,135

Lines Across

Detail Model 2014-2018 Base Plan	Beginning Gross Plant In Service	Total Book Closings	Gross Plant In Service
Year 2015			
CHI Elec Dist General Common (390-398)	88,333	1,317	89,650
CHI Elec Dist General IL (391-398)	309,429	133	309,562
CHI Elec Dist General MI (390-398)	47,124	3,070	50,194
CHI Elec Distribution IL (361-373)	4,509,157	33,157	4,540,009
CHI Elec Distribution MI (361-373)	1,230,296	50,156	1,279,506
Year 2016			
CHI Elec Dist General Common (390-398)	89,650	1,177	90,826
CHI Elec Dist General IL (391-398)	309,562	105	309,667
CHI Elec Dist General MI (390-398)	50,194	3,131	53,325
CHI Elec Distribution IL (361-373)	4,540,009	1,321	4,538,869
CHI Elec Distribution MI (361-373)	1,279,506	55,172	1,333,668

Wide Report

Report: Rate Base

Detail Model 2014-2018 Base Plan	Rate Base per Books	Rate Base Adjustments			Rate Base Adj Total	Rate Base
	Retail - Illinois	Plant Disall...	Inventory Disal...	New Plant...	Retail - Illinois	Retail - Illinois
Dec 2014						
Plant In Service	12,021,999	-5,000	0	10,000	5,000	12,026,999
Less Depreciation Reserve	-5,082,583	2,231	0	-4,920	-2,689	-5,085,271
Net Plant	6,939,416	-2,769	0	5,080	2,311	6,941,728
Fuel Inventory	208,581	0	-150	0	-150	208,431
new line	0	0	0	0	0	0
Working Capital Allowance	15,790	0	0	0	0	15,790
Total Working Capital Items	224,371	0	-150	0	-150	224,221
Less: Plant-Related Deferred Income Taxes	-611,168	10,111	0	-59	10,052	-601,116
Total Deductions	-611,168	10,111	0	-59	10,052	-601,116
Other Jurisdictional Adjustments	0	0	0	0	0	0
Total Utility Rate Base	6,552,620	7,342	-150	5,021	12,213	6,564,833

Wide Entity Across

Report: Rate Base Adj Total

Detail Model 2014-2018 Base Plan	Retail - Illinois			Retail - Michigan		CHI Gas	
	Rate Base per Books	Rate Base Adj ...	Rate Base	Rate Base per Books	Rate Base	Rate Base per Books	Rate Base
Dec 2015							
Plant In Service	12,227,510	5,000	12,232,510	5,095,545	5,095,545	3,570,922	3,570,92
Less Depreciation Reserve	-5,443,197	-7,326	-5,450,522	-2,251,895	-2,251,895	-1,852,990	-1,852,99
Net Plant	6,784,313	-2,326	6,781,987	2,843,650	2,843,650	1,717,933	1,717,93
Fuel Inventory	441,450	-150	441,300	222,207	222,207	0	
new line	0	0	0	0	0	0	
Working Capital Allowance	15,572	0	15,572	-1,893	-1,893	6,585	6,58
Total Working Capital Items	457,022	-150	456,872	220,314	220,314	6,585	6,58
Less: Plant-Related Deferred Incom...	-551,629	10,115	-541,514	-226,690	-226,690	-347,555	-347,55
Total Deductions	-551,629	10,115	-541,514	-226,690	-226,690	-347,555	-347,55
Other Jurisdictional Adjustments	0	0	0	0	0	0	
Total Utility Rate Base	6,689,706	7,639	6,697,345	2,837,274	2,837,274	1,376,963	1,376,96

Wide Line by Entity

Report: Rate Base per Books

Detail Model 2014-2018 Base Plan	Rate Base per Books	Rate Base Adjustments	Rate Base Adj Total	Rate Base
Dec 2015				
Plant In Service				
Plant Disallowance		-5,000		
Retail - Illinois	12,227,510		5,000	12,232,510
Inventory Disallowance		0		
Retail - Michigan	5,095,545		0	5,095,545
New Plant in Service		10,000		
CHI Gas	3,570,922		0	3,570,922
Less Depreciation Reserve				
Plant Disallowance		2,514		
Retail - Illinois	-5,443,197		-7,326	-5,450,522
Inventory Disallowance		0		
Retail - Michigan	-2,251,895		0	-2,251,895
New Plant in Service		-9,840		
CHI Gas	-1,852,990		0	-1,852,990

Excel Drill-down Options:

All reports viewed in Browse Reports have drilldown available, back to the input data. Users have the option to send selected drilldown information along when a report is exported to Excel. This drilldown detail will not necessarily be the full data path, but encompasses some key sources. The available drilldown information is:

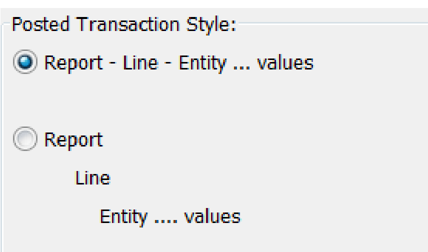
- Posted Transactions – show details on postings from the Planning Ledger (primarily used for the Income Statement, Balance Sheet, etc.)
- Rollups – Information on summary reports which are rollups across an entity group (e.g., on a Plant Account Detail report, the rollup information would be the amounts by individual plant accounts).
- Allocations – Amounts that are allocated from one report to another using the Edit Allocations screen.

Below is an example of a report exported with drilldown.

	A	B	C	D	E	F	G
1							
2	Detail Model 2016-2020 Base Plan	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015
3							
4	***Chicago Electric***						
5							
6	Gross Margin:						
7	Credits						
8	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule) Line: AD:[Total Revenue] Entity: Chicago Electric - Residential IL [Orig]	196,083	168,995	162,491	133,207	143,308	184,235
9	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule) Line: AD:[Total Revenue] Entity: Chicago Electric - Commercial IL [Orig]	74,006	68,929	70,060	67,522	71,192	75,144
10	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule) Line: AD:[Total Revenue] Entity: Chicago Electric - Industrial IL [Orig]	15,260	14,123	14,396	14,919	15,715	23,673
11	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule) Line: AD:[Total Revenue] Entity: Chicago Electric - Street Lighting IL [Orig]	841	746	703	640	661	635
12	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule) Line: AD:[Total Revenue] Entity: Chicago Electric - Residential MI [Orig]	97,597	84,949	79,893	64,460	69,782	86,239
13	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule) Line: AD:[Total Revenue] Entity: Chicago Electric - Commercial MI [Orig]	50,250	43,452	44,963	41,564	46,474	51,761
14	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule) Line: AD:[Total Revenue] Entity: Chicago Electric - Industrial MI [Orig]	16,552	15,306	15,605	16,178	17,050	25,771
15	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule) Line: AD:[Total Revenue] Entity: Chicago Electric - Street Lighting MI [Orig]	728	646	609	554	573	550
16	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule) Line: AD:[Total Revenue] Entity: Chicago Electric - Wholesale [Orig]	872	799	790	732	755	916
17	Post from Report: Other Operating Revenue (Planning Entity) Line: E:[Total 450 Account] Entity: Chicago Electric [Orig]	38	38	38	38	38	38
18	Post from Report: Other Operating Revenue (Planning Entity) Line: I:[Total 451 Account] Entity: Chicago Electric [Orig]	95	95	95	95	95	95
19	Post from Report: Other Operating Revenue (Planning Entity) Line: N:[Total 454 Account] Entity: Chicago Electric [Orig]	117	117	117	117	118	118
20	Post from Report: Other Operating Revenue (Planning Entity) Line: Y:[Total 456 Account] Entity: Chicago Electric [Orig]	374	374	374	375	375	375
21	Post from Report: Goal Seek for Rate Relief (Jurisdiction) Line: BY:[Total Rate Change Revenue - to Income Statement] Entity: Retail - Illinois [Orig]						
22	Total Revenue	452,813	398,569	390,135	340,401	366,135	449,550
23							
24	Operating Expenses:						
25	Debits						
26	Post from Report: Fuel Expense Report (Planning Entity) Line: I:[Total Generation Cost] Entity: Chicago Electric [Orig]	182,720	182,720	182,720	182,720	182,720	182,720
27	Post from Report: Fuel Expense Report (Planning Entity) Line: N:[Total Purchased Power Cost] Entity: Chicago Electric [Orig]	12,522	12,522	12,522	12,522	12,522	12,522
28	Post from Report: Fuel Expense Report (Planning Entity) Line: S:[Total Other Fuel Cost] Entity: Chicago Electric [Orig]	2,206	2,206	2,206	2,206	2,206	2,206
29	Fuel & Purchased Power	197,449	197,449	197,449	197,449	197,449	197,449
30	Gas Costs						
31	Steam Costs						
32	Total Energy Costs	197,449	197,449	197,449	197,449	197,449	197,449

Transaction Display

Users can choose two different styles for the exported drilldown.

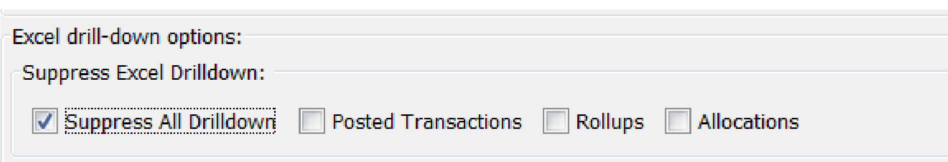


The example above shows the Report-Line-Entity style, with all information on one line. Below is the indented style.

	A	B	C	D
1				
2	Detail Model 2016-2020 Base Plan	Jan 2015	Feb 2015	Mar 2015
3				
4	***Chicago Electric***			
5				
6	Gross Margin:			
7	Credits			
8	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule)			
9	Line: AD:[Total Revenue]			
10	Entity: Chicago Electric - Residential IL [Orig]	196,083	168,995	162,491
11	Entity: Chicago Electric - Commercial IL [Orig]	74,006	68,929	70,060
12	Entity: Chicago Electric - Industrial IL [Orig]	15,260	14,123	14,396
13	Entity: Chicago Electric - Street Lighting IL [Orig]	841	746	703
14	Entity: Chicago Electric - Residential MI [Orig]	97,597	84,949	79,893
15	Entity: Chicago Electric - Commercial MI [Orig]	50,250	43,452	44,963
16	Entity: Chicago Electric - Industrial MI [Orig]	16,552	15,306	15,605
17	Entity: Chicago Electric - Street Lighting MI [Orig]	728	646	609
18	Entity: Chicago Electric - Wholesale [Orig]	872	799	790
19	Post from Report: Other Operating Revenue (Planning Entity)			
20	Line: E:[Total 450 Account]			
21	Entity: Chicago Electric [Orig]	38	38	38
22	Line: I:[Total 451 Account]			
23	Entity: Chicago Electric [Orig]	95	95	95
24	Line: N:[Total 454 Account]			
25	Entity: Chicago Electric [Orig]	117	117	117
26	Line: Y:[Total 456 Account]			
27	Entity: Chicago Electric [Orig]	374	374	374
28	Post from Report: Goal Seek for Rate Relief (Jurisdiction)			
29	Line: BY:[Total Rate Change Revenue - to Income Statement]			
30	Entity: Retail - Illinois [Orig]			
31	Total Revenue	452,813	398,569	390,135
32				

Suppress Drilldown

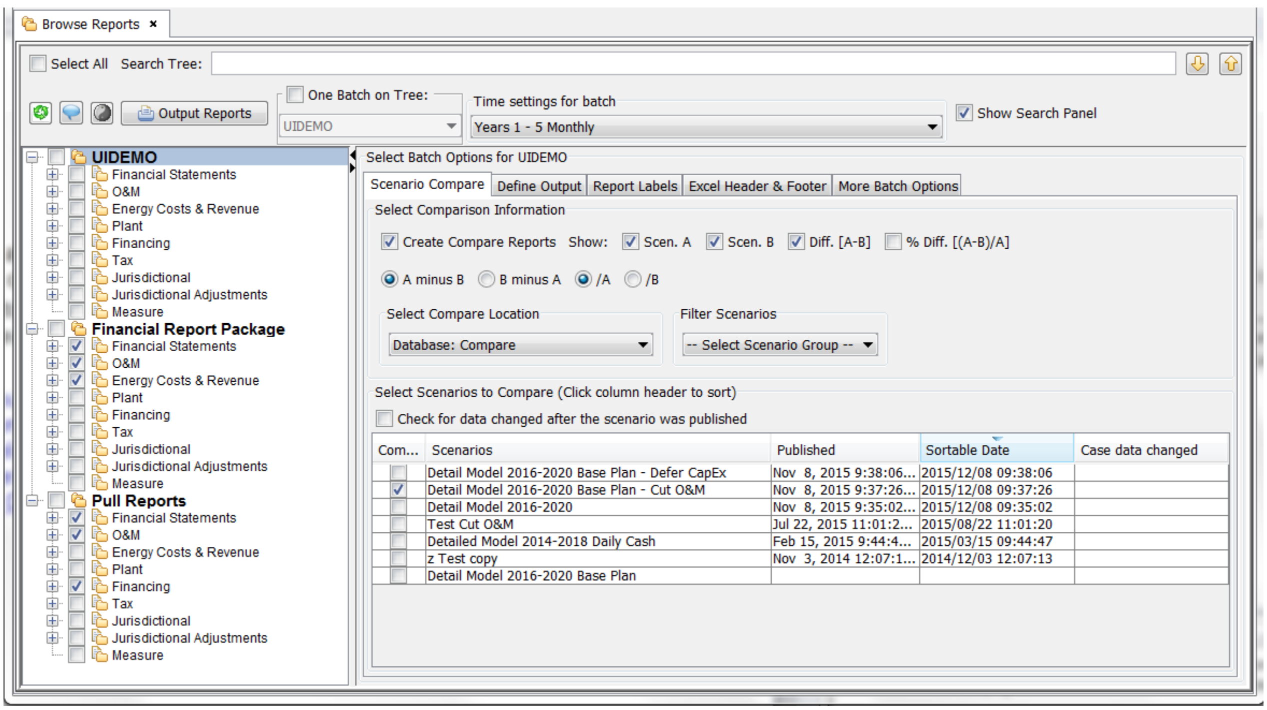
Users have the ability to suppress the drilldown. When reports are provided to executives, such as in a Financial Reporting batch, model users will commonly suppress all drilldown, to keep the reports simple. Users can suppress all drilldown, or selectively suppress drilldown.



Below is the same report with all drilldown suppressed.

A	B	C	D	E	F
Detail Model 2016-2020 Base Plan	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015
Chicago Electric					
Gross Margin:					
Total Revenue	452,813	398,569	390,135	340,401	366,135
Operating Expenses:					
Fuel & Purchased Power	197,449	197,449	197,449	197,449	197,449
Gas Costs					
Steam Costs					
Total Energy Costs	197,449	197,449	197,449	197,449	197,449
Gross Margin	255,364	201,120	192,685	142,952	168,686
O&M Before Goal Seeking	59,660	60,415	60,206	60,322	61,656
Goal Seeking O&M					
O&M	59,660	60,415	60,206	60,322	61,656
Taxes Other Than Income	12,582	12,582	12,582	12,582	12,582
EBITDA	183,122	128,123	119,898	70,049	94,448

Batch Options



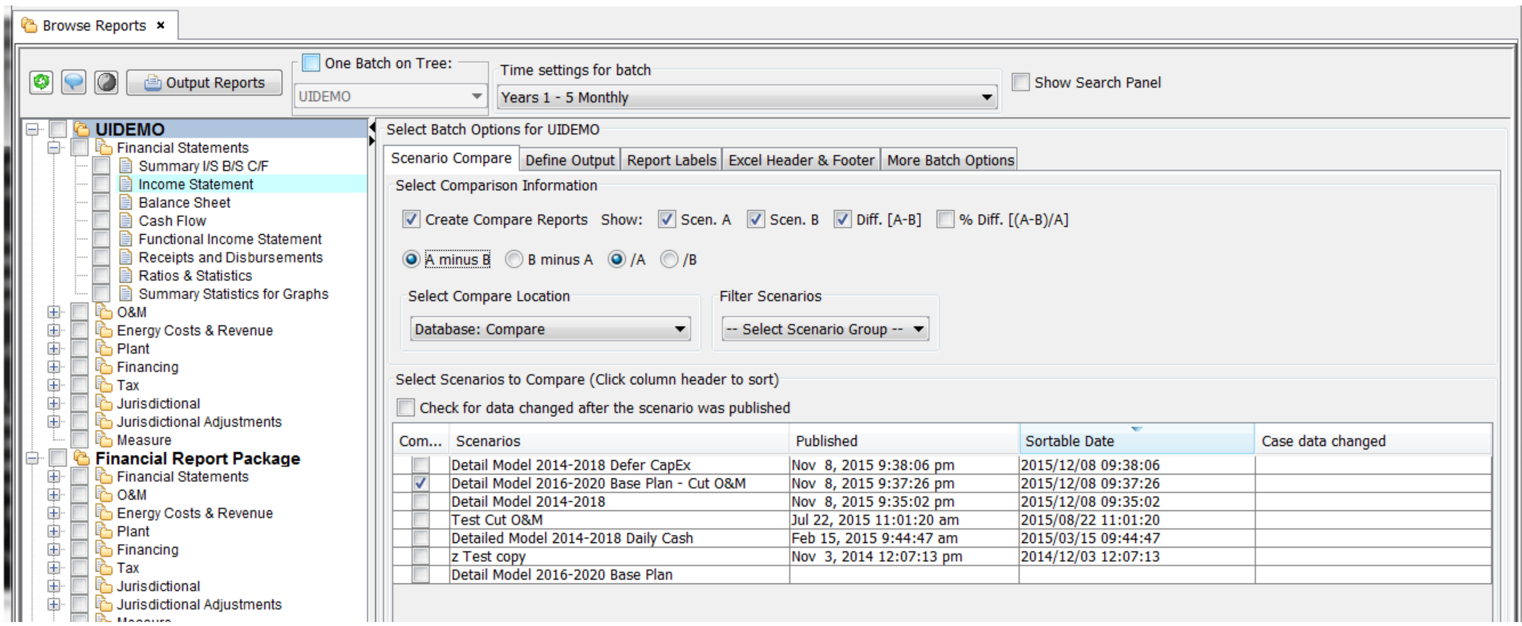
The Batch Options tabs allow the user to define settings that apply to all reports in the selected batch. Some Batch settings can be overridden at the Report Group or Report Level, such as Time setting (Report Group) or scaling (by report). The Report Batch options tab has five sub-tabs.

- Scenario Compare Tab (shown above) – used to configure scenario comparison settings
- Define Output Tab – used to configure the Output Reports action

- Report Labels Tab – used to set various report display options
- Excel Header & Footer Tab – used to configure (optional) Excel Header/Footer
- More Batch Options Tab – used to define additional batch-related options.

It is important to note that the first batch in the list is the always the user's Personal Batch. It is named for the user's logon ID.

Batch Options - Scenario Compare Tab



The Scenario Compare tab on the Browse Reports screen allows the user to select which scenario(s) to include for comparison, to configure how the comparison reports are presented, and to turn scenario comparison on or off. This section explains the mechanics of the screen. Note – See Scenario Compare Reports for examples and guidance on running Scenario Compares.

Below are the key controls and options of the tab.

- Create Compare Reports: Check this box to enable Scenario Compare reports. Note – when turning OFF Compare Reports, it is not necessary to undo the other selections (below). Just uncheck that one checkbox.
- Scen A / Scen B – use these checkboxes to set whether the report amounts for the current scenario (always A) and / or the comparison scenarios (B) show in the report.
- Difference A-B: Displays a difference column in the comparison report. Note that the text of the option will change

depending upon the A Minus B or B Minus A setting below

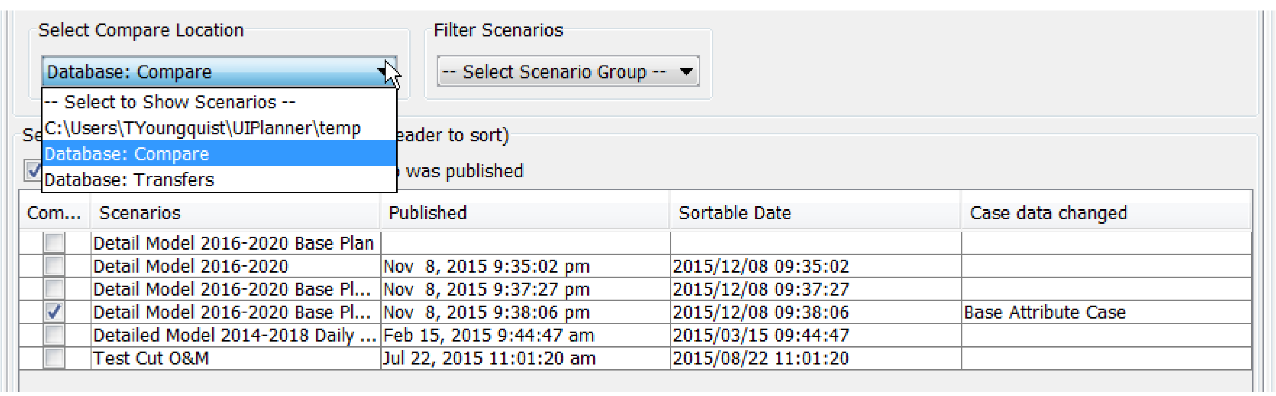
- % Diff [A-B)/B]: Displays a percent difference column in the comparison report and shows the underlying math. Note that the text of the option will change depending upon the /A or /B setting below
- A minus B or B minus A: This radio button selection defines whether the difference is calculated A-B or B-A
- /A or /B - This radio button selection defines whether the denominator for percent differences is A - current scenario or B - (comparison scenario(s)

The Select Compare Location allows the user to select where to look for the Comparison scenarios. Depending upon the client configuration, compare scenarios can be stored in the database or in local folders (user’s C:\ drive or network folders. See Manage Scenarios for how to delete (unpublish) published scenarios.

The Scenario Group filter and security settings in the Scenario Compare tab are based on the active scenario.

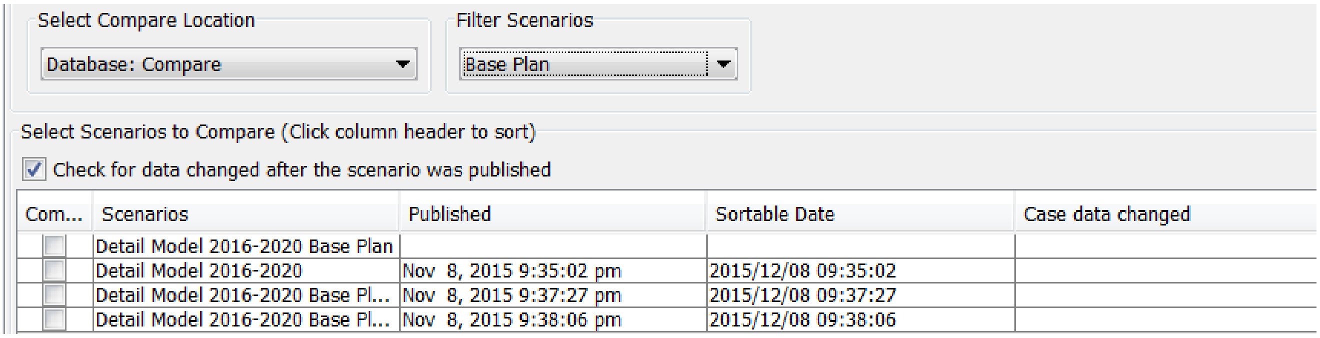
Select Scenario

The first step in selecting the scenario(s) to compare to is to select the location in which ti find them. Scenarios can be published either to the database or to a network file location (either a shared folder or on the user's C:\ drive)

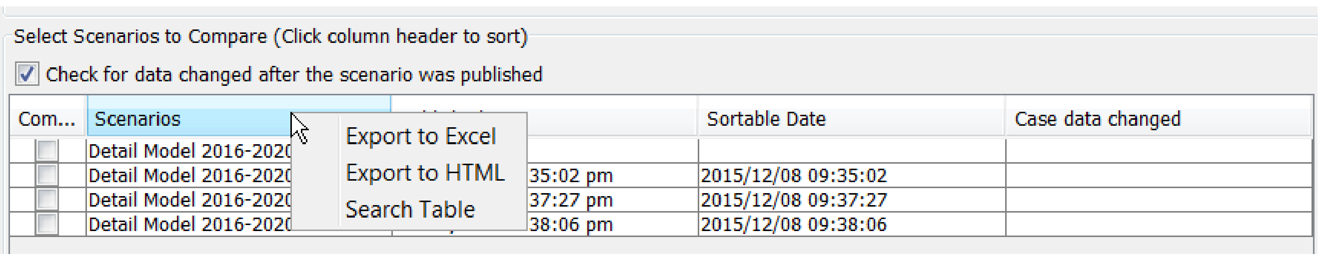


Once the user has selected the Compare location, the grid will show all of the available scenarios for comparison. User the checkboxes to select the scenario(s) for comparison. As indicated above, UIPlanner can compare multiple scenarios. Also note that the current scenario is listed – this enables period over period comparisons (using an appropriately defined custom column set.) See Scenario Compare Reports fro more information.

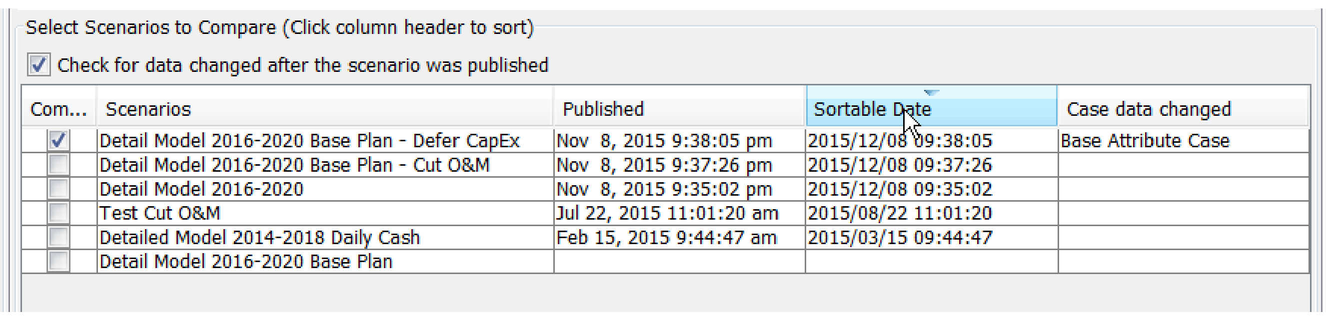
The scenarios in the list can be further filtered by Scenario Group, if desired.



Right click on the header row to export to Excel or to search in the grid, if the list is long.

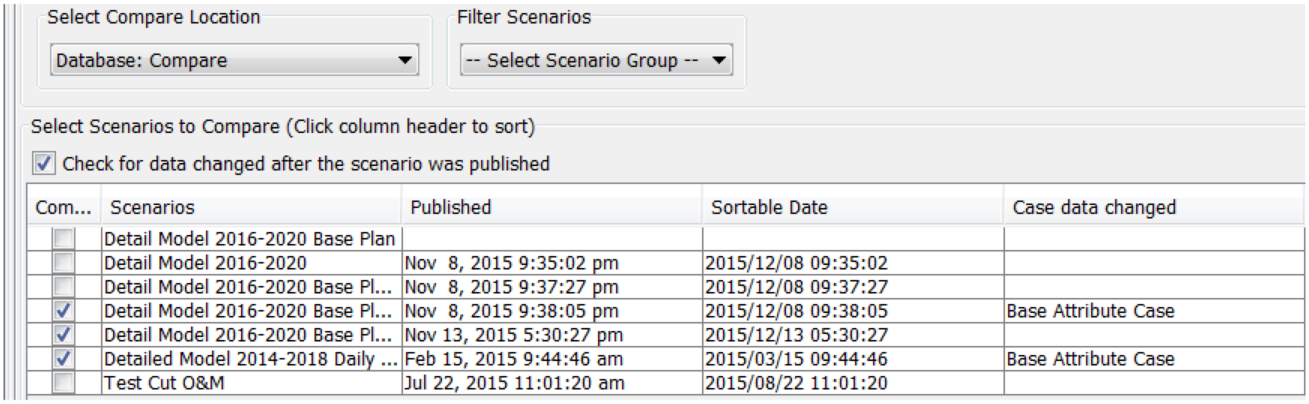


The grid includes the publish date in both Month/Day/Year/Time format and in a sortable format.

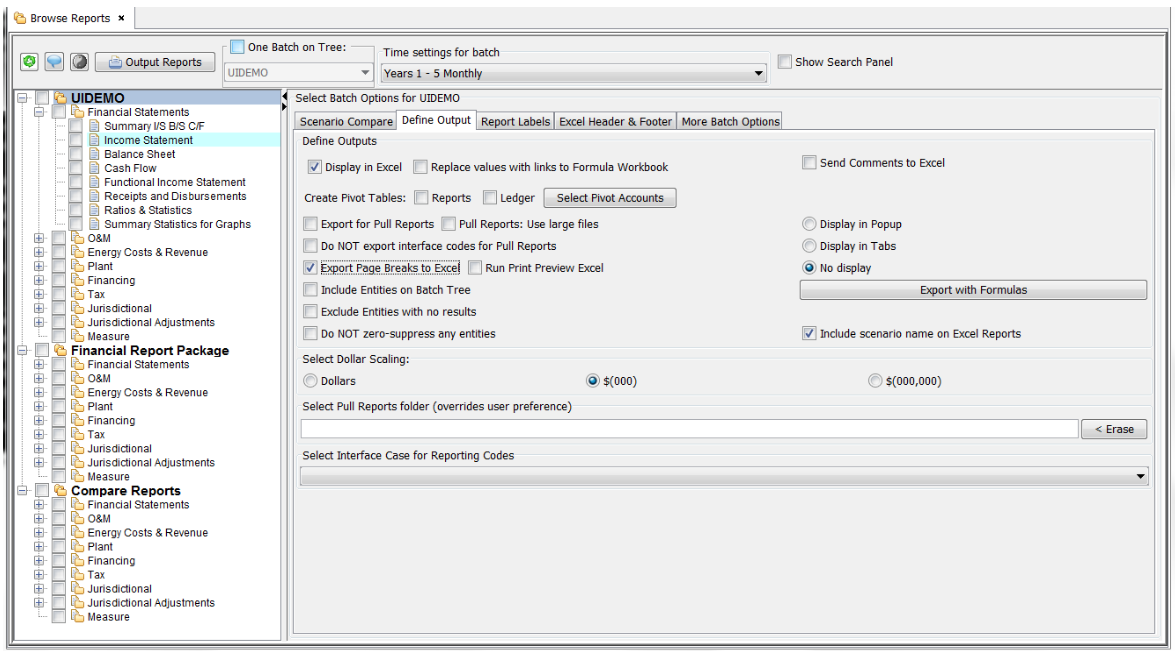


Data Changes

When comparing scenarios, it is important to be assured that the published scenarios are up to date. It is possible that a scenario was published, but has since been changed (but not republished). The Check for data changed after the scenario was published checkbox allows the user to quickly confirm this. If the checkbox is checked, whenever a scenario is selected, the Case Data Changed column will indicate this (it does not list ALL cases that have changed, just the first one found.) This may indicate that that scenario needs to be rerun and republished.



Batch Options - Define Output Tab

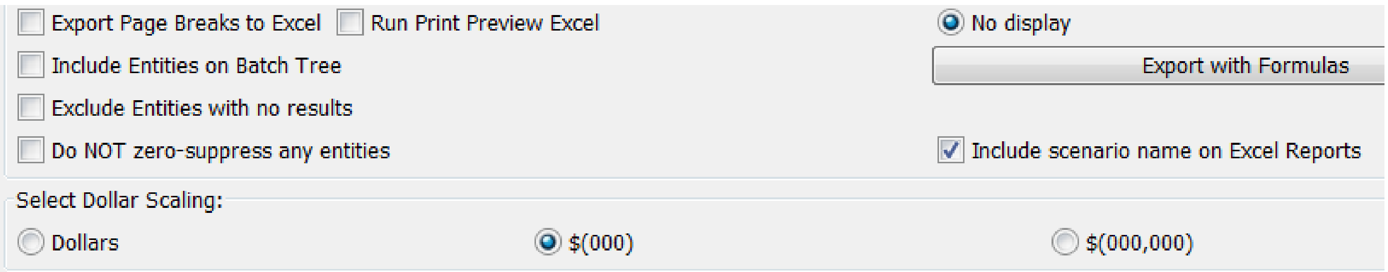


When UIPlanner sequences are run, the results of all reports run are stored in memory on the user's local machine. Users can view individual report results on Browse Reports or send them to Excel, but in order to process multiple reports (a Batch), they must use the Output Reports button in the top region of the Browse Reports screen. The Define Output tab is where the user configures the output process.

Note - Batch Options are set for the batch selected on the left. This is important to remember, because if a user inadvertently changes settings for a public batch (thinking that they are in their Personal Batch), those changes will be to the public batch. For this reason, it is recommended that unless necessary, users choose One Batch on Tree, and display only their Personal Batch.

Report Display

The Define Outputs tab controls several settings that impact the display of all reports in the batch (separately from outputting the reports). These are in the center region.



- Select Dollar Scaling – this selection sets the default scaling for all reports in the batch. Note that the scaling can be overridden at the individual report level (Excel Options tab);
- Export Page Breaks to Excel - Page breaks (defined by report, in Edit Calculations) are sent to Excel.
- Run Print Preview Excel - This check box enables print preview capabilities of the UIPlanner add-in. It must be checked to use the custom MS-Excel headers/footers.
- Include Entities on Batch Tree - If checked, the batch tree to the left will show all of the entities under each report name. See Report Tree for an example.
- Exclude Entities with no results - this option will automatically exclude any entities that do not have any results for the time period selected.
- Do NOT zero-suppress any entities - This option will include all entities in the report, including those with values of $0. Note: This is typically used in Entities Across reports.

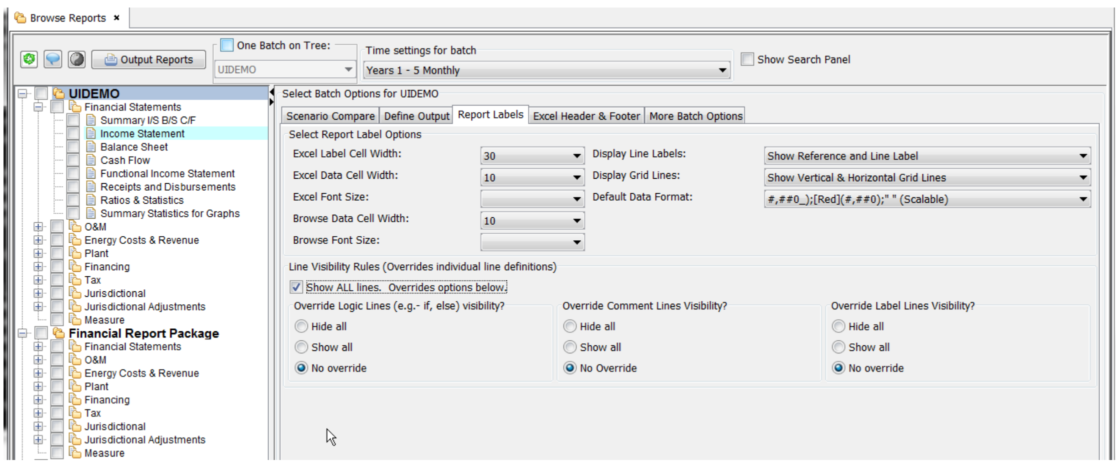
Output Settings

The other settings on the Define Output tab (at the top and the bottom) control what happens when the user selects the Output Reports button.

- Display in Excel - All batches/reports checked in the Report Tree will be output to Excel.
- Export for Pull Reports - When this box is checked, data for all reports checked in the Report tree will be exported to a specified folder for use in pull reporting. See Pull Reporting for more details on this feature.

- Select Pull Reports folder – This box is used to set a specific location for the Pull Report data for that batch. This allows users to send Pull Report data to different locations for different batches. Note that this overrides the User Preference for Pull Reports.
- Select Interface Case for Reporting Codes - If are exporting interface codes use this drop-down list to select which Interface Case to use.
- Do NOT export interface codes for Pull Reports - Because interface codes might cause issues with Pull Reports, users can choose not to export them by checking this box.
- Create Pivot Tables – Reports - When this box is checked, any checked reports have lines tagged for pivot table will be output as pivot tables.
- Create Pivot Tables – Ledger - When this box is checked, an Excel pivot table will be generated for the UIPlanner ledger results.
- Display in Popup or Display in Tabs or No Display - These radio buttons allow the user to bring up reports (that are checked in the report tree) in a pop up dialog box, in tabs on the UIPlanner model screen, or not at all. To turn these options off, select None.

Batch Options - Report Labels Tab



The Report Labels tab on Browse Reports has two regions

- Select Report Label Options – allows the user to customize various aspects of the Browse Reports display as well as the Excel Export.
- Line Visibility Rules – allows the user to display hidden lines.

Report Label Options

Options available for setting cell widths and font size include:

- Excel Label Cell Width: Sets the column width for the line description when reports are exported to Excel.
- Excel Data Cell Width: Sets the column width for the data columns when reports are exported to Excel.
- Excel Font Size: Sets the font size for the Excel report.
- Browse Data Cell Width: This will set the column width for all data columns on the Browse Reports screen display.
- Browse Font Size: This will set the font size on the Browse Reports screen display

Other settings include the following. Note that these settings also carry over to reports when they are exported to Excel.

- Display Line Labels: Allows the user to choose to show the internal UIPlanner line reference along with the line label. See below for Line Label Only compared to Line Label and Line Reference.

Detail Model 2014-2018 Base Plan	Dec 2014	Dec 2015	Dec 2016
CHI Elec Dist General Common (390-398)			
Beginning Gross Plant In Service	88,278	89,650	90,826
Beginning Accumulated Depreciation	18,206	22,643	27,152
Beginning Net Plant in Service	70,073	67,007	63,675
Beginning Accumulated Deferred Income Taxes	1,745	1,753	1,731
Book Depreciation - Vintage Assets:			

Detail Model 2014-2018 Base Plan	Dec 2014	Dec 2015	Dec 2016
CHI Elec Dist General Common (390-398)			
B:[]			
C:[Beginning Gross Plant In Service]	88,278	89,650	90,826
D:[Beginning Accumulated Depreciation]	18,206	22,643	27,152
E:[Beginning Net Plant in Service]	70,073	67,007	63,675
F:[]			
G:[Beginning Accumulated Deferred Income Taxes]	1,745	1,753	1,731
H:[]			
I:[Book Depreciation - Vintage Assets:]			

- Display Grid Lines: Allows the user to turn gridlines on or off.

Display Grid Lines: Show Vertical & Horizontal Grid Lines
Default Data Format:
Show Vertical & Horizontal Grid Lines
Show Vertical Lines Only
Show Horizontal Lines Only
No Grid Lines

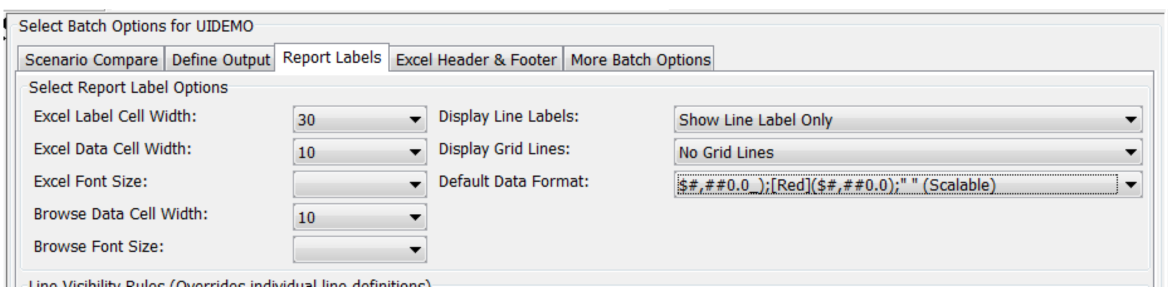
Below are examples with gridlines on or off.

Detail Model 2014-2018 Base Plan	Dec 2014	Dec 2015	Dec 2016
CHI Elec Dist General Common (390-398)			
Beginning Gross Plant In Service	88,278	89,650	90,826
Beginning Accumulated Depreciation	18,206	22,643	27,152
Beginning Net Plant in Service	70,073	67,007	63,675
Beginning Accumulated Deferred Income Taxes	1,745	1,753	1,731
Book Depreciation - Vintage Assets:			
Beg Bal Vintage Plant In Service	61,761	61,761	61,761
Book Retirements	0	0	0
End Bal Vintage Plant In Service	61,761	61,761	61,761

Report: Plant Account Detail

Detail Model 2014-2018 Base Plan	Dec 2014	Dec 2015	Dec 2016
CHI Elec Dist General Common (390-398)			
Beginning Gross Plant In Service	88,278	89,650	90,826
Beginning Accumulated Depreciation	18,206	22,643	27,152
Beginning Net Plant in Service	70,073	67,007	63,675
Beginning Accumulated Deferred Income Taxes	1,745	1,753	1,731
Book Depreciation - Vintage Assets:			
Beg Bal Vintage Plant In Service	61,761	61,761	61,761
Book Retirements	0	0	0
End Bal Vintage Plant In Service	61,761	61,761	61,761

» Default Data Format: This drop-down list allows the user to set the default format for data on reports. This format will be overridden by settings made on the Edit Calculations screen and in individual reports display options. The Personal Batch Default Data format is very useful in that it allows a user to define the format that reports will generally appear in. Below is an example where a user wants to see reports in millions, but also wants to see a bit more precision (e.g., 1 decimal place) in the results. See the example below. Note the Default data setting for the user.



Below is a sample report. Note the precision.

Report: Income Statement

TEst	Year 2015	Year 2016	Year 2017	Year 2018
Chicago Electric				
Operating Revenue:				
Electric Revenue	$5,024.2	$5,142.4	$5,274.3	$5,380.0
Gas Revenue	$0.0	$0.0	$0.0	$0.0
Affiliate Revenue	$0.0	$0.0	$0.0	$0.0
Goal Seek Revenue	$0.0	$0.0	$251.1	$437.2
Total Operating Revenue	$5,024.2	$5,142.4	$5,525.3	$5,817.2
Operating Expenses:				
Fuel	$2,219.1	$2,285.7	$2,354.3	$2,424.9
Purchased Power	$150.3	$154.8	$159.4	$164.2
Cost of Gas Sold	$0.0	$0.0	$0.0	$0.0
Operations and Maintenance	$745.6	$311.8	$777.2	$790.1
Depreciation, Decommissioning & Amortizations	$493.5	$496.7	$505.1	$515.1
Taxes Other Than Income Taxes	$151.0	$154.5	$157.1	$161.2
Total Operating Expenses	**$3,760**	**$3,403**	**$3,953**	**$4,055**

Line Visibility

The Line Visibility region gives the user the ability to override visibility settings made for report lines in the Edit Calculations screen. For presentation and distribution, users often hide "If"-statements or in-line comments so that the final report will be clean and readable. However, users may want to show these lines on a report during testing. When the Show All Lines checkbox is enabled, all hidden lines will be shown in the Browse Report display. This is a global setting – it applies to all reports. Note that if the user is in their Personal Batch, the setting will apply only to them.

Below is an example. In the Plant Detail report, the user has hidden a number of lines. Note the line references.

Detail Model 2014-2018 Base Plan	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018
CHI Elec Dist General Common (390-398)					
B:[]					
C:[Beginning Gross Plant In Service]	88,278	89,650	90,826	92,003	93,180
D:[Beginning Accumulated Depreciation]	18,206	22,643	27,152	31,719	36,345
E:[Beginning Net Plant in Service]	70,073	67,007	63,675	60,284	56,835
F:[]					
G:[Beginning Accumulated Deferred Income Taxes]	1,745	1,753	1,731	1,645	1,496
H:[]					
I:[Book Depreciation - Vintage Assets:]					
P:[Beg Bal Vintage Plant In Service]	61,761	61,761	61,761	61,761	61,761
Q:[Book Retirements]	0	0	0	0	0
R:[End Bal Vintage Plant In Service]	61,761	61,761	61,761	61,761	61,761
S:[]					
T:[Book Depreciation:]					
U:[Average Vintage Plant In Service]	61,761	61,761	61,761	61,761	61,761
V:[Book Depreciation Rate]	0.417%	0.417%	0.417%	0.417%	0.417%
X:[Book Depreciation on Vintage Plant]	257	257	257	257	257

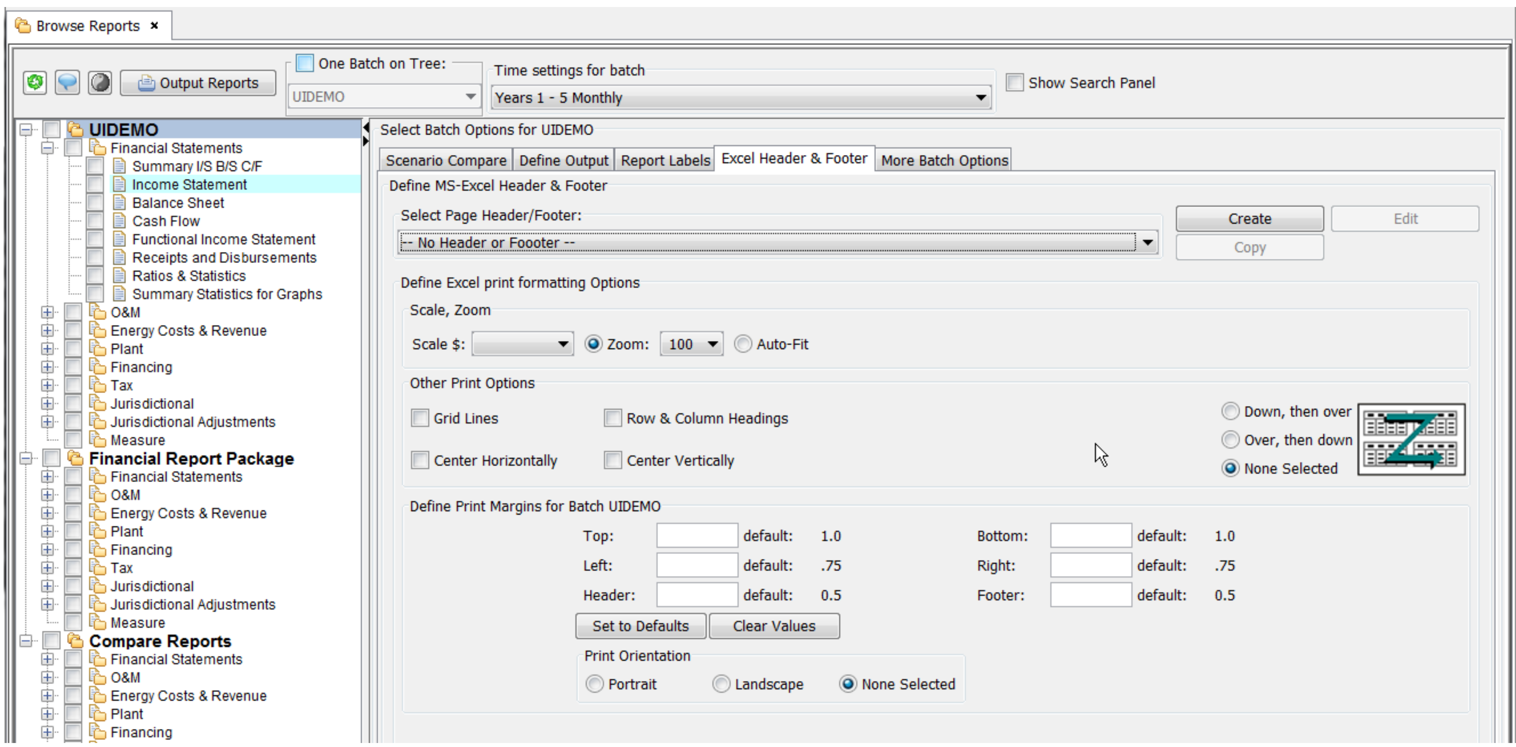
Here is the same report, with the Show All Lines checkbox enabled. This setting applies to both visibility options – Always Hide and Suppress if all Zero.

Report: Plant Account Detail

Detail Model 2014-2018 Base Plan	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018
CHI Elec Dist General Common (390-398)					
B:[]					
C:[Beginning Gross Plant In Service]	88,278	89,650	90,826	92,003	93,180
D:[Beginning Accumulated Depreciation]	18,206	22,643	27,152	31,719	36,345
E:[Beginning Net Plant in Service]	70,073	67,007	63,675	60,284	56,835
F:[]					
G:[Beginning Accumulated Deferred Income Taxes]	1,745	1,753	1,731	1,645	1,496
H:[]					
I:[Book Depreciation - Vintage Assets:]					
J:[Current Tick]	24	36	48	60	72
K:[Last Actual Time period]	12.0	12.0	12.0	12.0	12.0
L:[If]					
M:[Initial Vintage Plant In Service]	0	0	0	0	0
N:[Initial Vintage Acc dep]	0	0	0	0	0
O:[end if]					
P:[Beg Bal Vintage Plant In Service]	61,761	61,761	61,761	61,761	61,761
Q:[Book Retirements]	0	0	0	0	0

Most users just use the Show All Lines checkbox to show hidden lines. The remaining settings in this region are seldom used.

Batch Options - Excel Header and Footer Tab

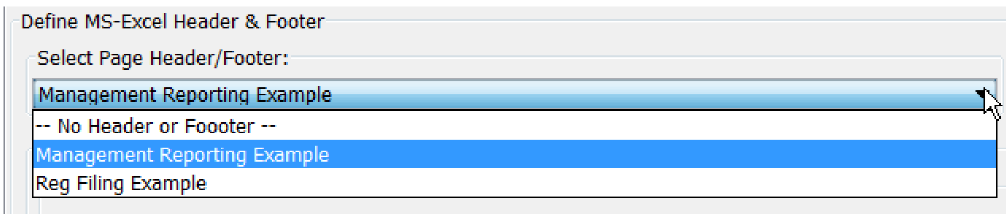


The Excel Header & Footer tab is used to select headers and footers that UIPlanner can apply to reports when they are sent to Excel. It also allows the user to define Excel print formatting and print margins. This tab is comprised of two regions:

- Define MS-Excel Header & Footer – allows the user to select from existing Headers and Footers, and to create new ones.
- Define Excel Print Formatting Options – allows the user to define batch-level settings for how reports will be formatted when sent to Excel. Note that these can be overridden at the report level, on the Excel Options tab.

Define MS-Excel Header & Footer

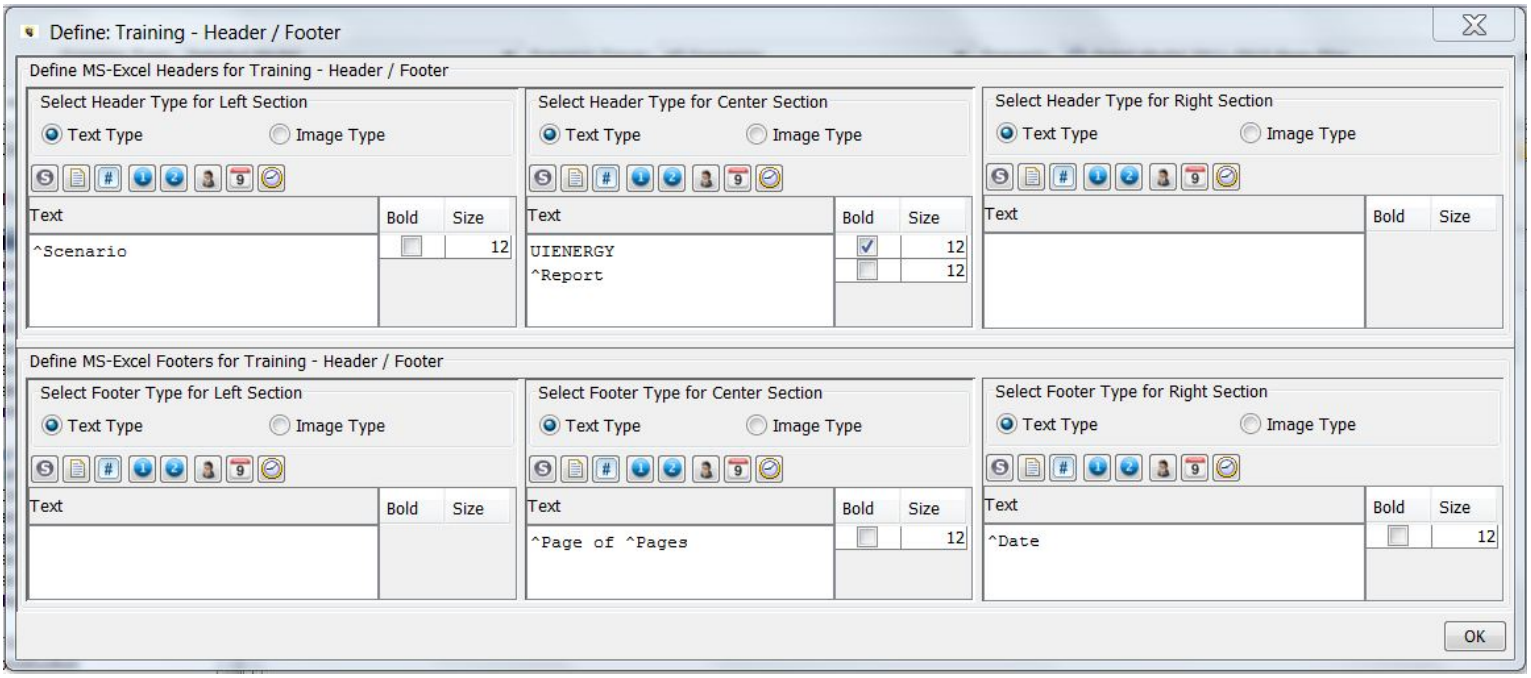
Use the dropdown list to select an existing Header/Footer. That Header/Footer will then be applied to all reports in the current batch.



Some points to note about the UIPlanner Excel headers and footers:

- Users can set up any number of different header/footer combinations.
- If a predefined header/footer is NOT selected in this tab, UIPlanner will use the default header and footer setting.
- Headers and footers are batch-specific. This allows the users to set up and specify which header/footer setting to use for different report batches.
- Once a header/footer has been defined, it is available to all users
- The Run Print Preview in Excel checkbox on the Output Options tab needs to be checked in order to invoke a custom MS Excel header/footer.

Below is an example of a custom header/footer.



See Excel Header-Footer for more information on Headers and Footers, and detailed configuration instructions.

Create a new Excel Header/Footer:

Click the Create button, and enter the desired name in the Add Object Dialog box.

Then select it from the drop-down list. This will bring up an empty header/footer definition screen, with the name of the new Header/Footer. Configure as desired and hit OK.

Edit an existing Excel Header/Footer:

From the Select MS Excel Header & Footer drop-down list, choose the header/footer to edit, and click Edit.

The header/footer definition dialog will then open, with all settings of the header/footer as it is currently defined. Make the desired changes and click OK.

Copy an existing Excel Header/Footer:

From the Select MS Excel Header & Footer drop-down list, choose the header/footer to copy, and click Copy.

This will bring up a dialog box. Enter the name for the new header/footer. This new header/footer definition will inherit all settings of the one it was copied it from.

Edit this new header/footer by selecting it from the Select MS Excel Header & Footer drop-down list and clicking Edit. Make the desired changes and click OK.

Define Excel Print Formatting Options

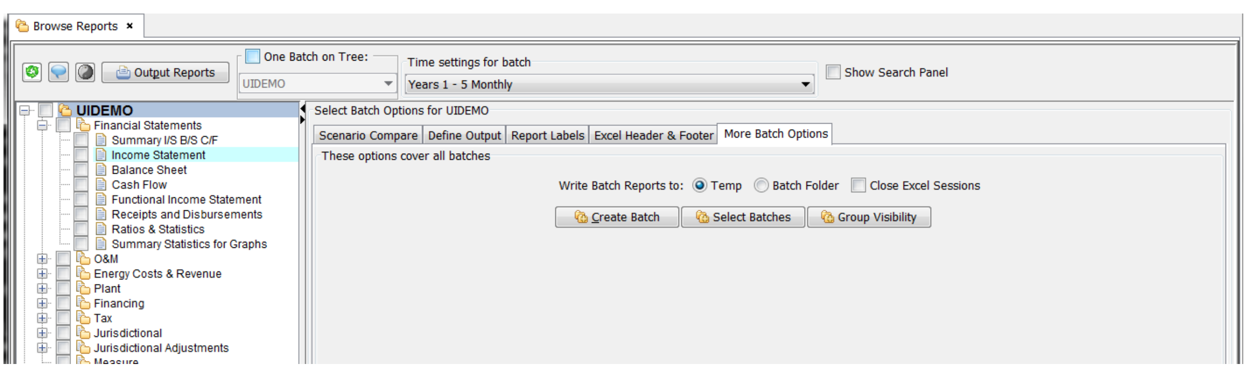
The other purpose of the Excel Header & Footer tab is to set various batch-level settings for report when they are sent to Excel using the Output Reports button.

Scale $ - this droplist allows the user to define dollar scaling for the report (dollars, $000, millions). This setting controls both the on screen display as well as Excel output.

The other settings on the screen all control the Excel output.

- Zoom - Sets the zoom percent in Excel
- Auto-fit - Auto-fits the column widths to fit one page
- Grid Lines – turn on gridlines in Excel
- Row and Column Headings – turns on Excel row and column headings
- Center Horizontally – centers the report horizontally
- Center Vertically – centers the report vertically
- Print order – these radio buttons allow the user to define the print order. Down then Over, Over then Down, or no selection.
- Print Margins – these allow the user to set the margins (top, bottom, left, right, header and footer). These are set in inches, with the defaults indicated. There are buttons to a) clear all settings and b) to set them to the default values.
- Print Orientation – Portrait, Landscape or none selected.

Batch Options - More Bath Options Tab



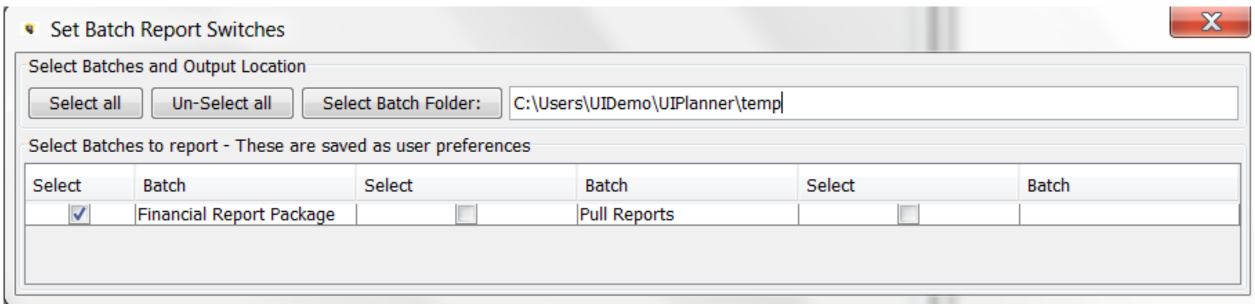
The More Batch Options tab contains options that apply to all batches. The various controls are described below.

Create Batch

The Create Batch button opens the Add Object dialog box, allowing the user to create a new batch (assuming that the user has Report Batch create rights).

Select Batches

This Select Batches button allows the user to set a folder location where one or more batches will be output to. The batch selections are a user preference. Note that the user's Personal Batch is not among these – it by default goes to the user's temp folder.

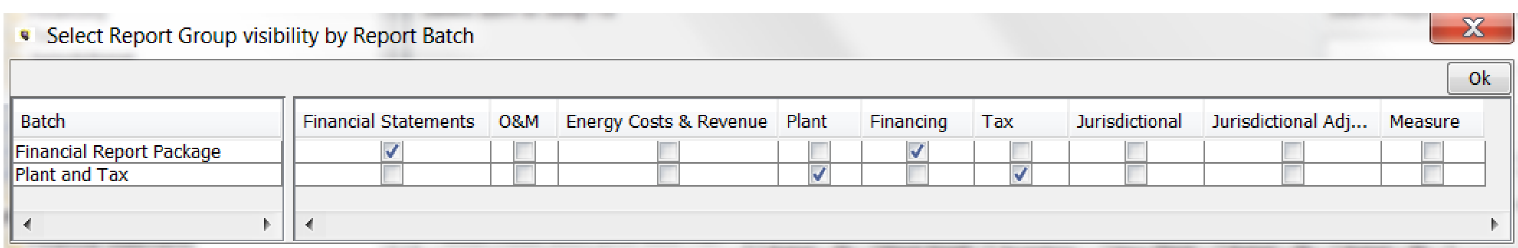


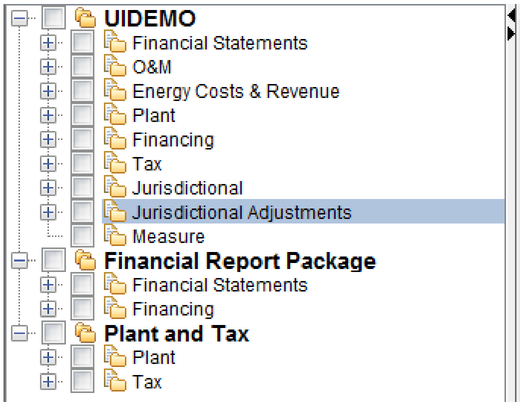
Write Batch Reports to

These radio buttons allow the user to choose the location for output batches. Select either (the Users) temp folder or a named batch folder (which is set using the Select Batches button).

Group Visibility

The Group Visibility button allows the user to customize which Report Groups are visible within each Batch. This can be help simplify the screen display if a certain batch is only related to one or two Report Groups. See the example below where the visibility is set for the Financial Report Package and Plant and Tax batches.





If the user wishes to add back selected report groups, they can just re-check them in the setup dialog.

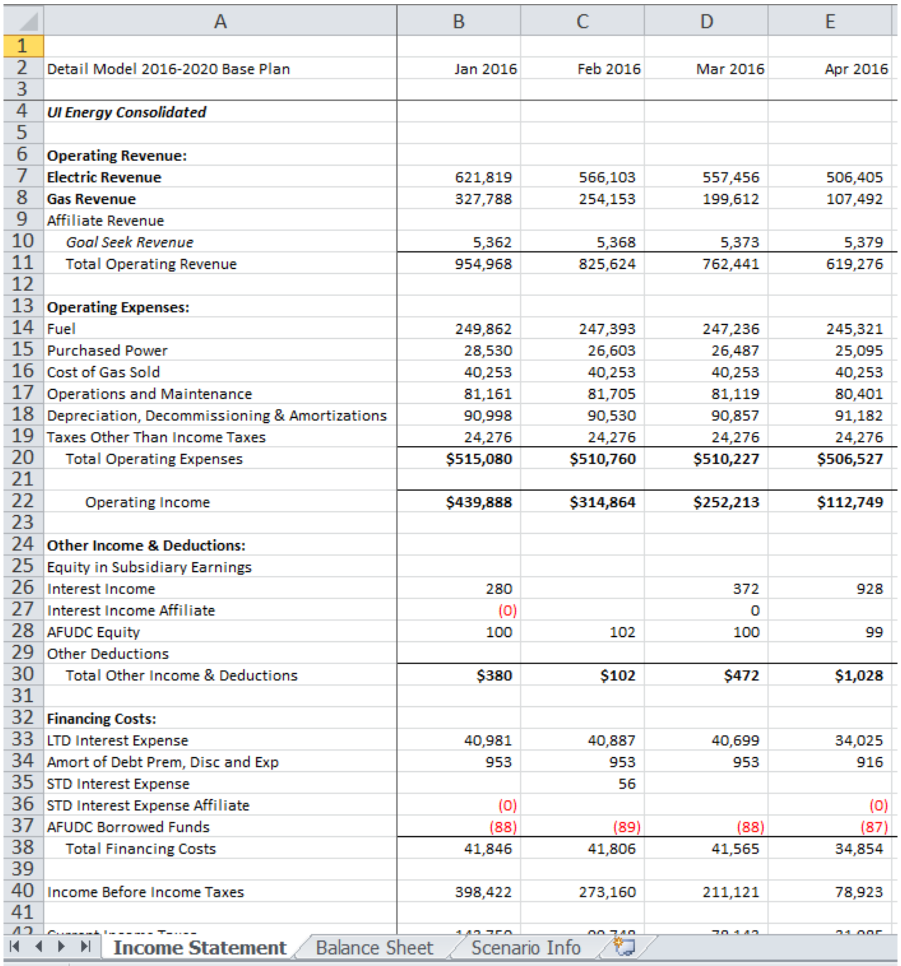
Note – hiding report groups is only available for custom batches. The user's Personal Batch always shows all report groups.

Close Excel Sessions

If a user has set up multiple batches to send out to folders, this checkbox will turn off the Export to Excel, to prevent multiple reports being sent to Excel at once.

UIPlanner Model Excel Reports

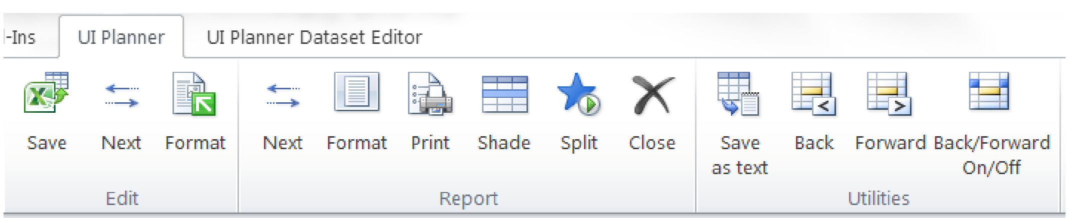
When an active report or batch of reports are exported to Excel from the Browse Reports screen, the reports are output as a series of tabs in Excel. In the example below, two reports (Income Statement and Balance Sheet) were output as two Excel tabs.



	A	B	C	D	E
1					
2	Detail Model 2016-2020 Base Plan	Jan 2016	Feb 2016	Mar 2016	Apr 2016
3					
4	***UI Energy Consolidated***				
5					
6	**Operating Revenue:**				
7	**Electric Revenue**	621,819	566,103	557,456	506,405
8	**Gas Revenue**	327,788	254,153	199,612	107,492
9	Affiliate Revenue				
10	*Goal Seek Revenue*	5,362	5,368	5,373	5,379
11	Total Operating Revenue	954,968	825,624	762,441	619,276
12					
13	**Operating Expenses:**				
14	Fuel	249,862	247,393	247,236	245,321
15	Purchased Power	28,530	26,603	26,487	25,095
16	Cost of Gas Sold	40,253	40,253	40,253	40,253
17	Operations and Maintenance	81,161	81,705	81,119	80,401
18	Depreciation, Decommissioning & Amortizations	90,998	90,530	90,857	91,182
19	Taxes Other Than Income Taxes	24,276	24,276	24,276	24,276
20	Total Operating Expenses	**$515,080**	**$510,760**	**$510,227**	**$506,527**
21					
22	Operating Income	**$439,888**	**$314,864**	**$252,213**	**$112,749**
23					
24	**Other Income & Deductions:**				
25	Equity in Subsidiary Earnings				
26	Interest Income	280		372	928
27	Interest Income Affiliate	(0)		0	
28	AFUDC Equity	100	102	100	99
29	Other Deductions				
30	Total Other Income & Deductions	**$380**	**$102**	**$472**	**$1,028**
31					
32	**Financing Costs:**				
33	LTD Interest Expense	40,981	40,887	40,699	34,025
34	Amort of Debt Prem, Disc and Exp	953	953	953	916
35	STD Interest Expense		56		
36	STD Interest Expense Affiliate	(0)			(0)
37	AFUDC Borrowed Funds	(88)	(89)	(88)	(87)
38	Total Financing Costs	41,846	41,806	41,565	34,854
39					
40	Income Before Income Taxes	398,422	273,160	211,121	78,923
41					

UIPlanner Add-in Buttons

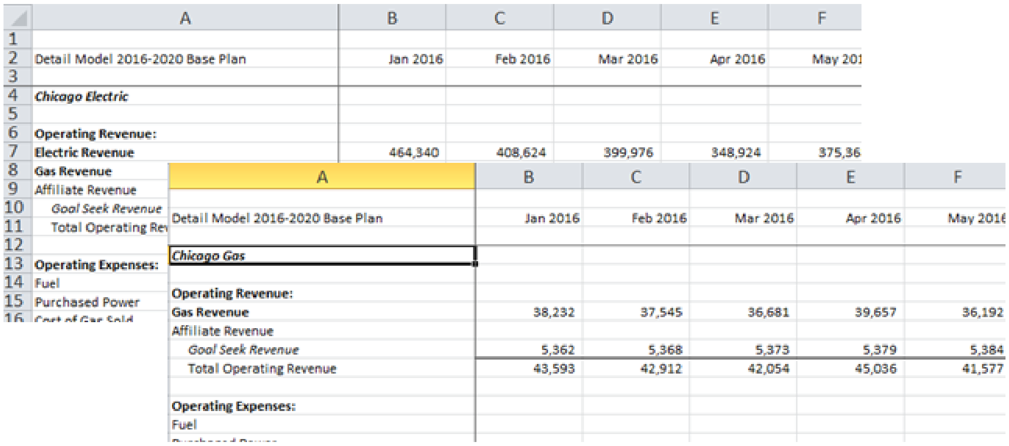
When reports are sent to Excel, the UIPlanner Excel Menu includes a set of buttons that allow the user to perform certain functions or to manipulate the report data.



The Report section contains the following buttons.

Next

If a tab includes multiple entities, each time the Next button is hit it will select the next entity. When it reaches the last one, it will go back to the first.



	A	B	C	D	E	F
1						
2	Detail Model 2016-2020 Base Plan	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 201
3						
4	*Chicago Electric*					
5						
6	**Operating Revenue:**					
7	**Electric Revenue**	464,340	408,624	399,976	348,924	375,36
8	**Gas Revenue**					
9	Affiliate Revenue					
10	*Goal Seek Revenue*					
11	Total Operating Re					
12						
13	**Operating Expenses:**					
14	Fuel					
15	Purchased Power					
16	Cost of Gas Sold					

A	B	C	D	E	F
Detail Model 2016-2020 Base Plan	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016
Chicago Gas					
Operating Revenue:					
Gas Revenue	38,232	37,545	36,681	39,657	36,192
Affiliate Revenue					
Goal Seek Revenue	5,362	5,368	5,373	5,379	5,384
Total Operating Revenue	43,593	42,912	42,054	45,036	41,577
Operating Expenses:					
Fuel					
Purchased Power					

Format

When the user hit the Format button, it will format the report for printing. This sets print titles and format for printing, using the header/footer definition, either default or custom.

UI Energy Consolidated
Utilities International UIPlanner Version J

Income Statement
Detail Model 2016-2020 Base Plan
($000)

Detail Model 2016-2020 Base Plan	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016
Chicago Electric					
Operating Revenue:					
Electric Revenue	464,340	408,624	399,976	348,924	375,368
Gas Revenue					
Affiliate Revenue					
Goal Seek Revenue					
Total Operating Revenue	464,340	408,624	399,976	348,924	375,368
Operating Expenses:					
Fuel	190,474	190,474	190,474	190,474	190,474
Purchased Power	12,898	12,898	12,898	12,898	12,898
Cost of Gas Sold					
Operations and Maintenance	61,467	61,059	62,051	62,134	63,541
Depreciation, Decommissioning & Amortizations	41,763	41,035	41,102	41,166	41,229
Taxes Other Than Income Taxes	12,871	12,871	12,871	12,871	12,871
Total Operating Expenses	$319,473	$318,337	$319,396	$319,543	$321,013
Operating Income	$144,867	$90,287	$80,580	$29,381	$54,355
Other Income & Deductions:					
Equity in Subsidiary Earnings					
Interest Income					

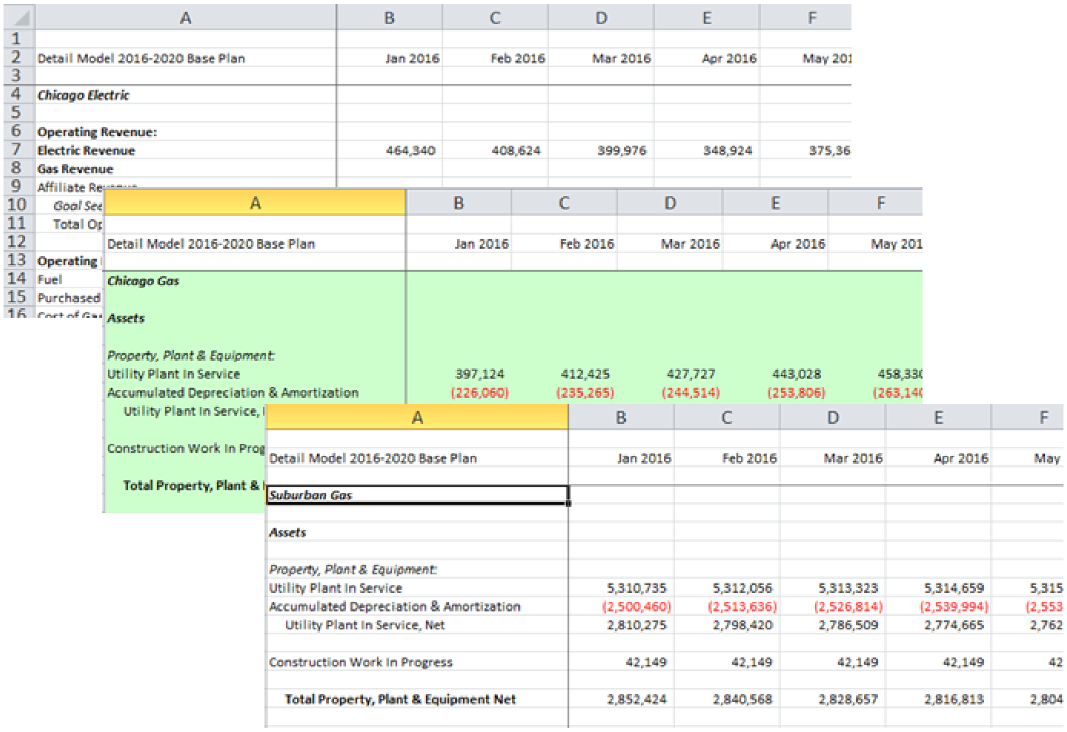
Note: This can be done automatically as the Batch level by selecting Run Print Preview Excel (Define Outputs tab).

Print

Hitting the Print button will queue the report for printing.

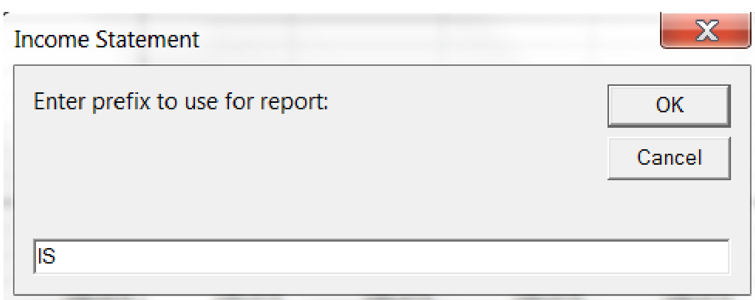
Shade

If a tab includes multiple entities, hitting the Shade button will shade alternate entities.



Split

If a tab includes multiple entities, the Split button allows the user to put each entity on a separate tab. When the Split button is hit, a dialog box prompts the user for a prefix to use, since the tab name cannot be duplicated.

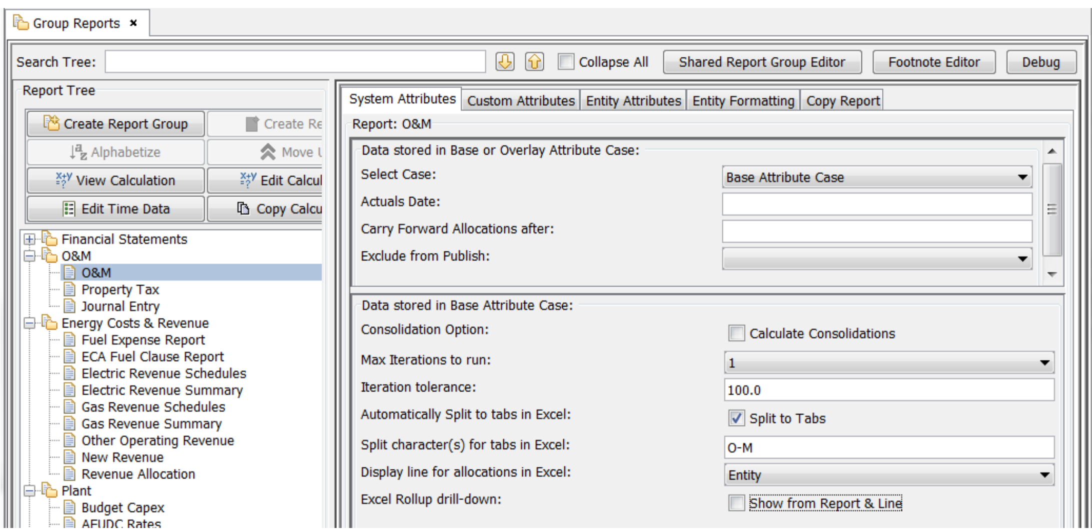


Upon hitting OK, the UIPlanner add-in will take the selected report and put each entity on a separate tab.

A	B	C	D	E	F	G	H	I
Detail Model 2016-2020 Base Plan	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 20
Chicago Electric								
Operating Revenue:								
Electric Revenue	464,340	408,624	399,976	348,924	375,368	451,158	528,048	522,2
Gas Revenue								
Affiliate Revenue								
Goal Seek Revenue								
Total Operating Revenue	464,340	408,624	399,976	348,924	375,368	451,158	528,048	522,2
Operating Expenses:								
Fuel	190,474	190,474	190,474	190,474	190,474	190,474	190,474	190,4
Purchased Power	12,898	12,898	12,898	12,898	12,898	12,898	12,898	12,8
Cost of Gas Sold								
Operations and Maintenance	61,467	61,059	62,051	62,134	63,541	62,948	65,594	64,1
Depreciation, Decommissioning & Amortizations	41,763	41,035	41,102	41,166	41,229	41,294	41,359	41,4
Taxes Other Than Income Taxes	12,871	12,871	12,871	12,871	12,871	12,871	12,871	12,8
Total Operating Expenses	**$319,473**	**$318,337**	**$319,396**	**$319,543**	**$321,013**	**$320,485**	**$323,196**	**$321,8**
Operating Income	**$144,867**	**$90,287**	**$80,580**	**$29,381**	**$54,355**	**$130,673**	**$204,852**	**$200,4**
Other Income & Deductions:								
Equity in Subsidiary Earnings								
Interest Income								

Income Statement / I S Chicago Electric / I S Chicago Gas / I S Chicago Nonutility / I S Prairie Gen / I S Suburban Gas / I S

Note – the Group Reports screen can be used to configure a given report to split to tabs every time it is sent to Excel. When set on Group Reports, it is a global setting, for all users.



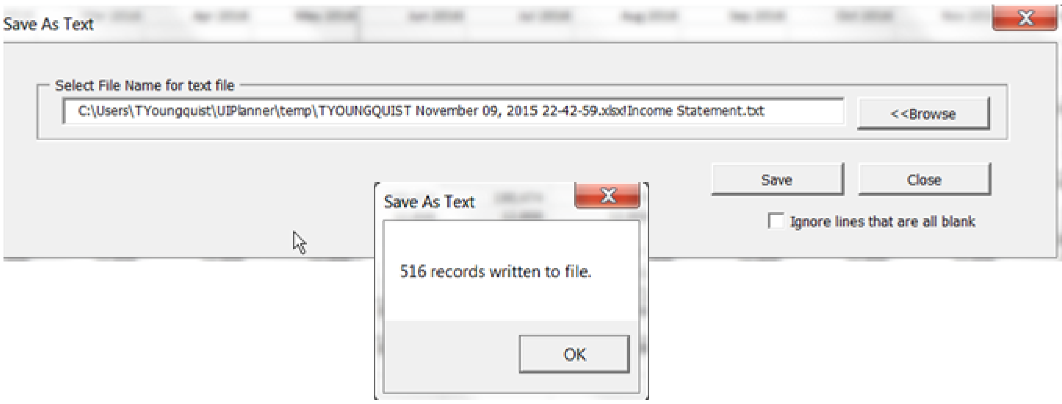
Close

Hitting the Close button will close the Excel session.

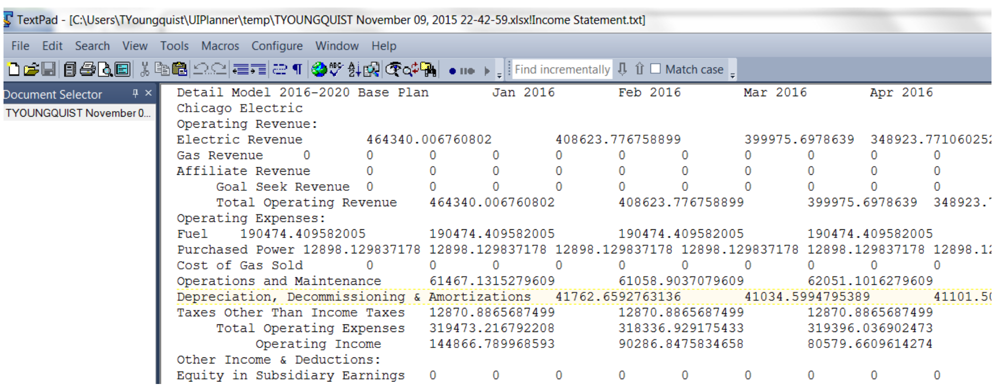
Save as Text

The Save as Text button in the Utilities section (far right) of the UIPlanner menu will save the report as a tab-delimited text file. This option is useful if model reports need to be provided to another system, and text files are more appropriate. It also includes an option whereby the saved file will ignore blank lines.

Hitting the Save as Text button brings up a dialog box prompting for a location to save. Upon hitting Save, the file will be saved as a txt file.



Below is the report as a text file.



Back/Forward

The Back/Forward buttons allow the user to track cell selection within the report, and scroll through the selections made.

Back/Forward On/Off

This button allows the user to toggle the Back/Forward functionality on or off.

Scenario Info Tab

The Scenario Info Tab (shown below) is inserted after the last report tab. This tab includes information such as the scenario, the run date/time, sequence/subsequence run, etc. The Scenario Info tab provides key audit trail information. Since it is attached to the UIPlanner output report and provides backup as to the source of that report.

	A	B
1	Scenario	Detail Model 2016-2020 Base Plan
2	Scenario Comments:	
3	Scenario Comment	Base 2016 - 2020 Plan for Fall Management Retreat.
4	Assumptions - Overview	All assumptions have been reviewed and approved by the Planning Committee. The sale of Prairie Station was excluded.
5	Assumptions - O&M	O&M now ties to the the 8+4 re-forecast. 2016 numbers and beyond were revised to reflect
6	Assumptions - Load	The August revision from the Load Forecasting Group was included.
7		
8	Print Date/Time:	November 09, 2015 21:04:18
9	Scenario run Date/Time:	11/9/2015 20:44
10	Scenario Id:	192
11	Version ID: 1	Executable version: 9.12.B
12	Base Year: 201401.0	Years run monthly: 5
13	Scenario Actuals Date: 201312	
14		
15	Cases in Scenario:	
16	Updated 2015.11.08-21:30 Attribute	Base Attribute Case
17	Updated 2014.12.23-23:49 Attribute	Targets 2011 - 2015 Attributes
18		
19	Updated 2015.07.22-17:21 Formula	Report Formats
20		
21	Updated 2014.12.30-13:34 Overlay	2014 - 2019 Base Plan
22	Updated 2014.09.18-12:03 Overlay	Data from Budget
23	Updated 2015.02.16-20:01 Actuals	Actuals
24		
25	Reports with Actuals Date::	
26	Bonds - Detailed Model	201412
27		
28	Report Sequence Set:	Tactical Model
29	Report Sequence Sub-Set:	None
30		
31	Related Scenarios:	Detail Model 2016-2020 Base Plan - Defer CapEx
32		
33		

Income Statement | Balance Sheet | **Scenario Info**

Scenario Compare Reports

One of the core capabilities of the UIPlanner Financial Model is the ability to scenario compare reports, which take the results of the current scenario and compare them to multiple (published) scenarios. With scenario compares, all reports are available, for all entities and all time periods.

See the Scenario Compare Tab for how to select which scenarios to compare, and how to configure the Scenario Compare settings. This section provides some additional details on scenario compare reports, as well as examples.

Lines and Entities in One Scenario and not the Other

If report lines or entities exist in one scenario and not the other, there will be values in one and not the other. Note the Water Revenue line. This line was added in the current scenario but was not in the compare scenario.

Report: Income Statement Scenario A: Detail Model 2016-2020 Base Plan Scenario B: Detail Model 2016-2020 (Version 1)

A: Detail Model 2016-2020 Base Plan	Year 2015			Year 2016		
B: Detail Model 2016-2020	Scen A	Scen B	Dif (A-B)	Scen A	Scen B	Dif (A-B)
Chicago Electric						
Operating Revenue:						
Electric Revenue	$5,024,157	$5,024,157	$0	$5,142,379	$5,142,379	$0
Gas Revenue	0	0	0	0	0	0
Water Revenue	1,109,560		1,109,560	1,142,846		1,142,846
Affiliate Revenue	0	0	0	0	0	0
Goal Seek Revenue	0	0	0	0	0	0
Total Operating Revenue	$6,133,716	$5,024,157	$1,109,560	$6,285,226	$5,142,379	$1,142,846

Drilldown in Scenario Compares

When running a scenario compare report, full drilldown is available in both the current scenario and the compare scenario (s), with several exceptions.

- Drilldown into multidimensional functions is not available in the compare scenario(s).
- Drilldown is not available into the difference or percent columns. The drilldown panel shows only the calculation of the difference/percent.

Select Entities | Browse Report | Graph Data | Excel Options

UIDEMO-Financial Statements-Income Statement

Format Report | Search Table | Drilldown on Data | Action Panel

Drilldown N:[Operations and Maintenance] - Chicago Electric (Year/2015)

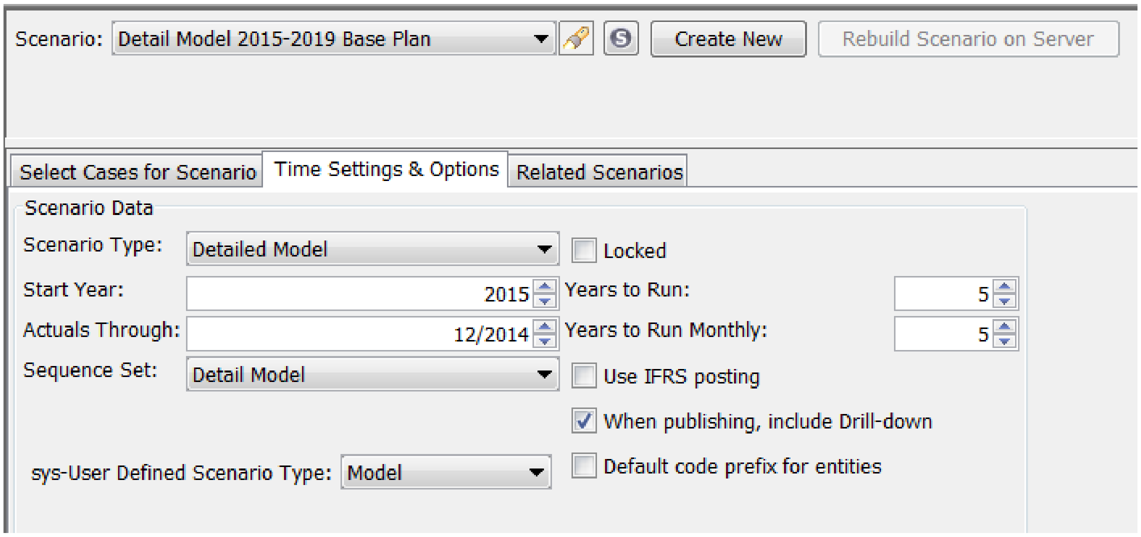
N:[Operations and Maintenance] % Difference

A: Detail Model 2016-2020 Base Plan	B: Detail Model 2014-2018 Base Plan - Cut O&M	(A - B)	(A - B) / A
739,114	711,884	27,231	3.6842%

Report: Income Statement Scenario A: Detail Model 2016-2020 Base Plan Scenario B: Detail Model 2014-2018 Base Plan - Cut O&M

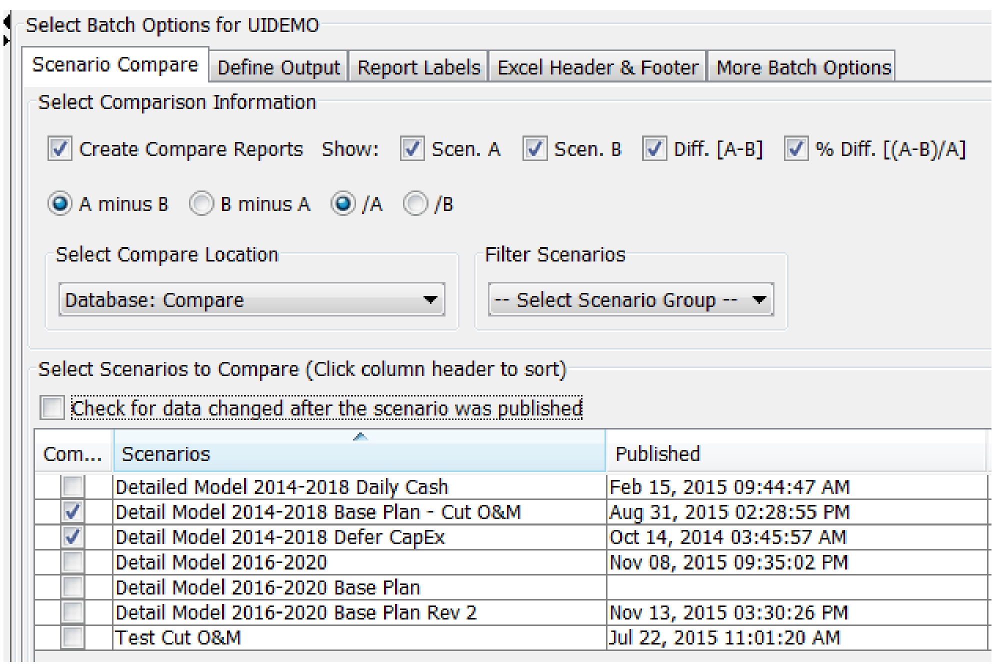
A: Detail Model 2016-2020 Base Plan	Year 2015				Year 2016			
B: Detail Model 2016-2020 Base Plan - Cut O&M	Scen A	Scen B	Dif (A-B)	% Dif (A-B...	Scen A	Scen B	Dif (A-B)	% Dif (A
Operating Expenses:								
Fuel	2,219,119	2,219,119	0	0.000%	2,285,693	2,285,693	0	0.0
Purchased Power	150,269	150,269	0	0.000%	154,778	154,778	0	0.0
Cost of Gas Sold	0	0	0		0	0	0	
Operations and Maintenance	739,114	711,884	27,231	3.684%	766,219	731,784	34,435	4.4
Goal Seek O&M	0	0	0		0	0	0	
Depreciation, Decommissioning & Amortizations	493,539	493,539	0	0.000%	496,696	496,696	0	0.0
Taxes Other Than Income Taxes	150,978	150,978	0	0.000%	154,451	154,451	0	0.0
Total Operating Expenses	**$3,753,020**	**$3,725,789**	**$27,231**	**0.726%**	**$3,857,836**	**$3,823,401**	**$34,435**	**0.8**
Operating Income	**$1,271,137**	**$1,298,368**	**($27,231)**	**-2.142%**	**$1,284,544**	**$1,318,979**	**($34,435)**	**-2.6**

- If a scenario was published with the option turned off in Manage Scenarios, drilldown will not be available. Publishing without drilldown makes scenario comparisons faster and take up less space.

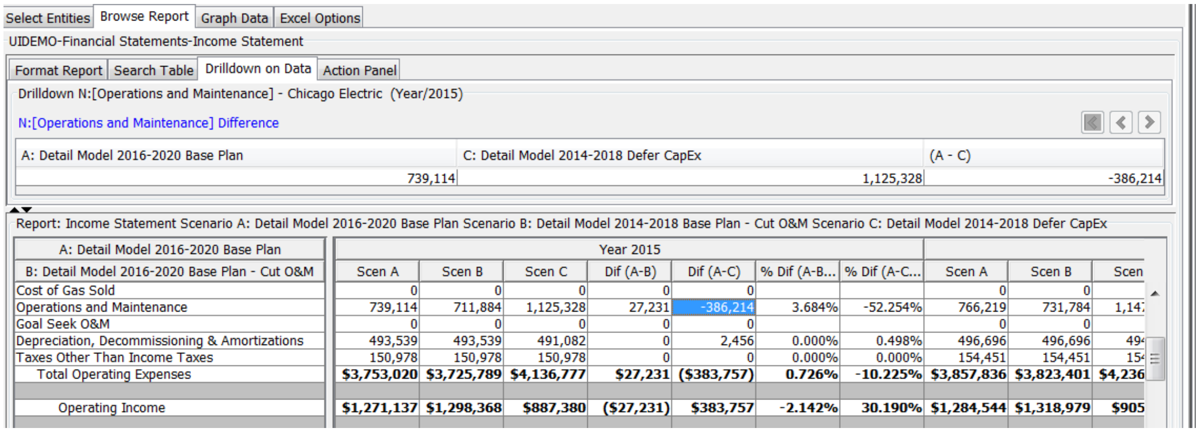


Compare Multiple Scenarios

Browse reports allows the user to compare more than two scenarios. There is no set limit, but multiple scenarios takes more memory. To select more than one compare scenario, check the checkbox in the Scenario Compare tab.



When multiple scenarios are selected for comparison, the scenarios involved are identified across the top bar of the Browse Reports data section. The top of the label section only lists scenarios A and B. The current scenario is always Scenario A, and the compare scenarios are assigned letters as needed. The difference and percent difference columns are always against the current scenario (A to B and A to C); the comparison does not compare B to C.



Select Entities | Browse Report | Graph Data | Excel Options

UIDEMO-Financial Statements-Income Statement

Format Report | Search Table | Drilldown on Data | Action Panel

Drilldown N:[Operations and Maintenance] - Chicago Electric (Year/2015)

N:[Operations and Maintenance] Difference

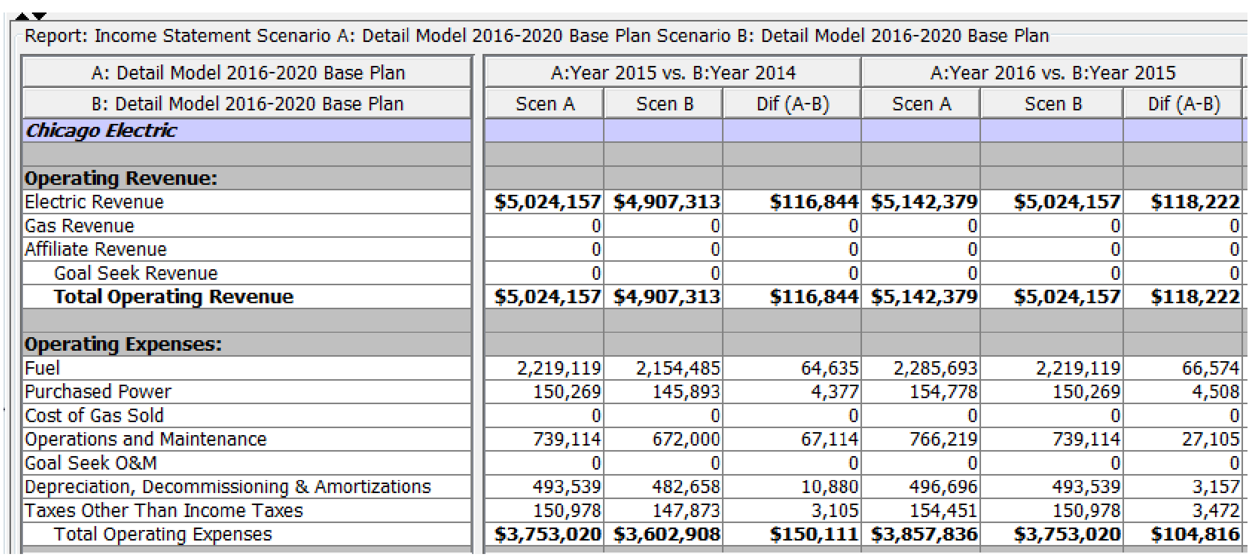
A: Detail Model 2016-2020 Base Plan	C: Detail Model 2014-2018 Defer CapEx	(A - C)
739,114	1,125,328	-386,214

Report: Income Statement Scenario A: Detail Model 2016-2020 Base Plan Scenario B: Detail Model 2014-2018 Base Plan - Cut O&M Scenario C: Detail Model 2014-2018 Defer CapEx

A: Detail Model 2016-2020 Base Plan	Year 2015									
B: Detail Model 2016-2020 Base Plan - Cut O&M	Scen A	Scen B	Scen C	Dif (A-B)	Dif (A-C)	% Dif (A-B...	% Dif (A-C...	Scen A	Scen B	Scen
Cost of Gas Sold	0	0	0	0	0			0	0	
Operations and Maintenance	739,114	711,884	1,125,328	27,231	-386,214	3.684%	-52.254%	766,219	731,784	1,14
Goal Seek O&M	0	0	0	0	0			0	0	
Depreciation, Decommissioning & Amortizations	493,539	493,539	491,082	0	2,456	0.000%	0.498%	496,696	496,696	49
Taxes Other Than Income Taxes	150,978	150,978	150,978	0	0	0.000%	0.000%	154,451	154,451	15
Total Operating Expenses	**$3,753,020**	**$3,725,789**	**$4,136,777**	**$27,231**	**($383,757)**	**0.726%**	**-10.225%**	**$3,857,836**	**$3,823,401**	**$4,236**
Operating Income	**$1,271,137**	**$1,298,368**	**$887,380**	**($27,231)**	**$383,757**	**-2.142%**	**30.190%**	**$1,284,544**	**$1,318,979**	**$905**

Compare a Scenario to itself

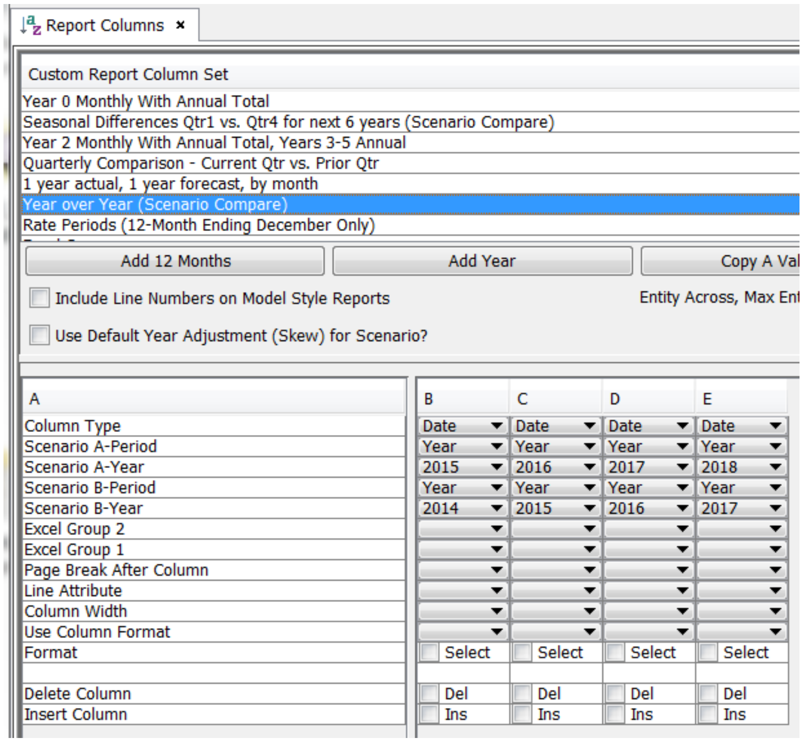
UIPlanner allows the user to compare the current scenario to itself (the current scenario is always listed first in the Scenario Compare tab). When used with an appropriately configured Report Column set, this enables period over period comparisons. See below.



Report: Income Statement Scenario A: Detail Model 2016-2020 Base Plan Scenario B: Detail Model 2016-2020 Base Plan

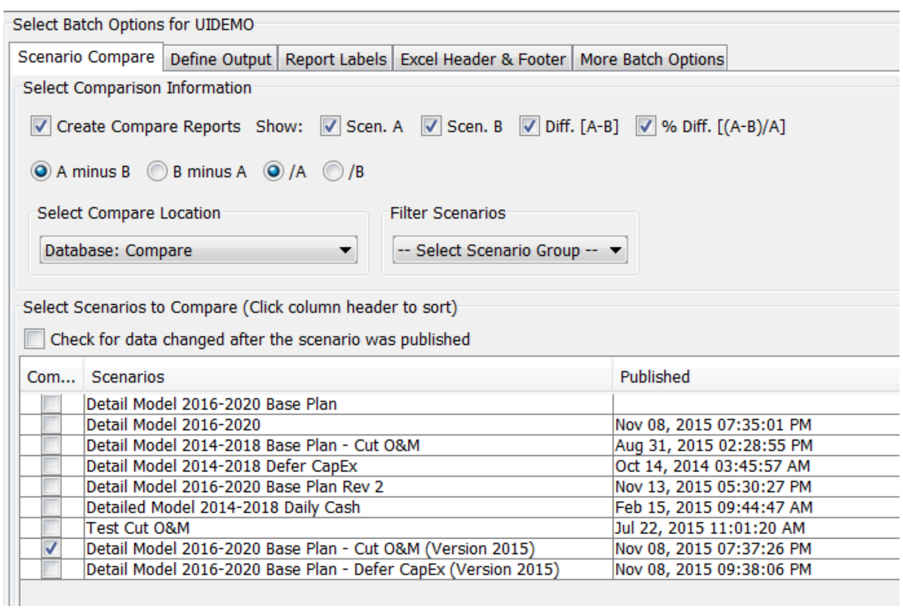
A: Detail Model 2016-2020 Base Plan	A:Year 2015 vs. B:Year 2014			A:Year 2016 vs. B:Year 2015		
B: Detail Model 2016-2020 Base Plan	Scen A	Scen B	Dif (A-B)	Scen A	Scen B	Dif (A-B)
Chicago Electric						
Operating Revenue:						
Electric Revenue	**$5,024,157**	**$4,907,313**	**$116,844**	**$5,142,379**	**$5,024,157**	**$118,222**
Gas Revenue	0	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0	0
Goal Seek Revenue	0	0	0	0	0	0
Total Operating Revenue	**$5,024,157**	**$4,907,313**	**$116,844**	**$5,142,379**	**$5,024,157**	**$118,222**
Operating Expenses:						
Fuel	2,219,119	2,154,485	64,635	2,285,693	2,219,119	66,574
Purchased Power	150,269	145,893	4,377	154,778	150,269	4,508
Cost of Gas Sold	0	0	0	0	0	0
Operations and Maintenance	739,114	672,000	67,114	766,219	739,114	27,105
Goal Seek O&M	0	0	0	0	0	0
Depreciation, Decommissioning & Amortizations	493,539	482,658	10,880	496,696	493,539	3,157
Taxes Other Than Income Taxes	150,978	147,873	3,105	154,451	150,978	3,472
Total Operating Expenses	**$3,753,020**	**$3,602,908**	**$150,111**	**$3,857,836**	**$3,753,020**	**$104,816**

Below is the underlying Report Column set. Note that there are different Year settings for the A and B scenarios. This is what enables the period over period, as both A and B are the same scenario.

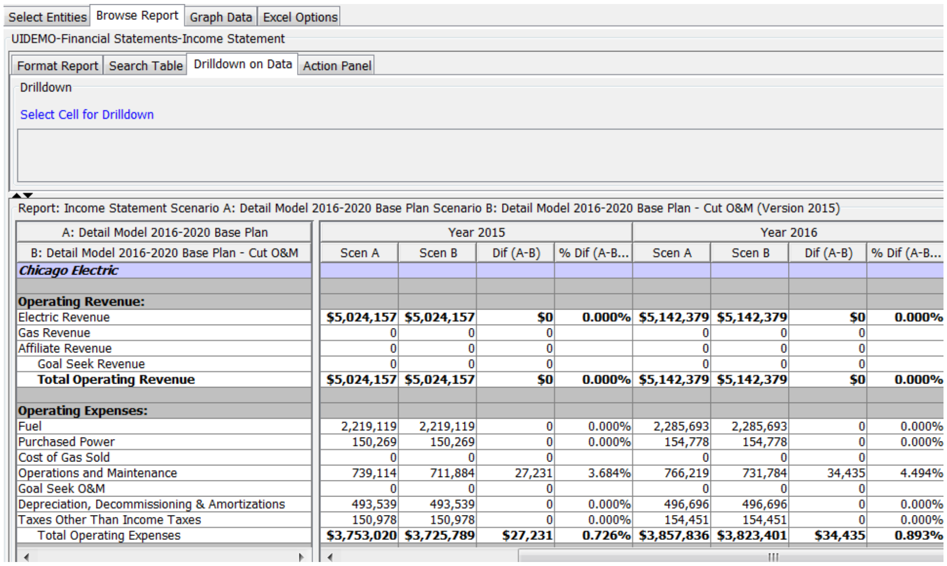


Compare across Versions

Scenario comparison is available across Versions. The Scenario Compare tab lists the Version number for all published scenarios that are NOT from the current Version.

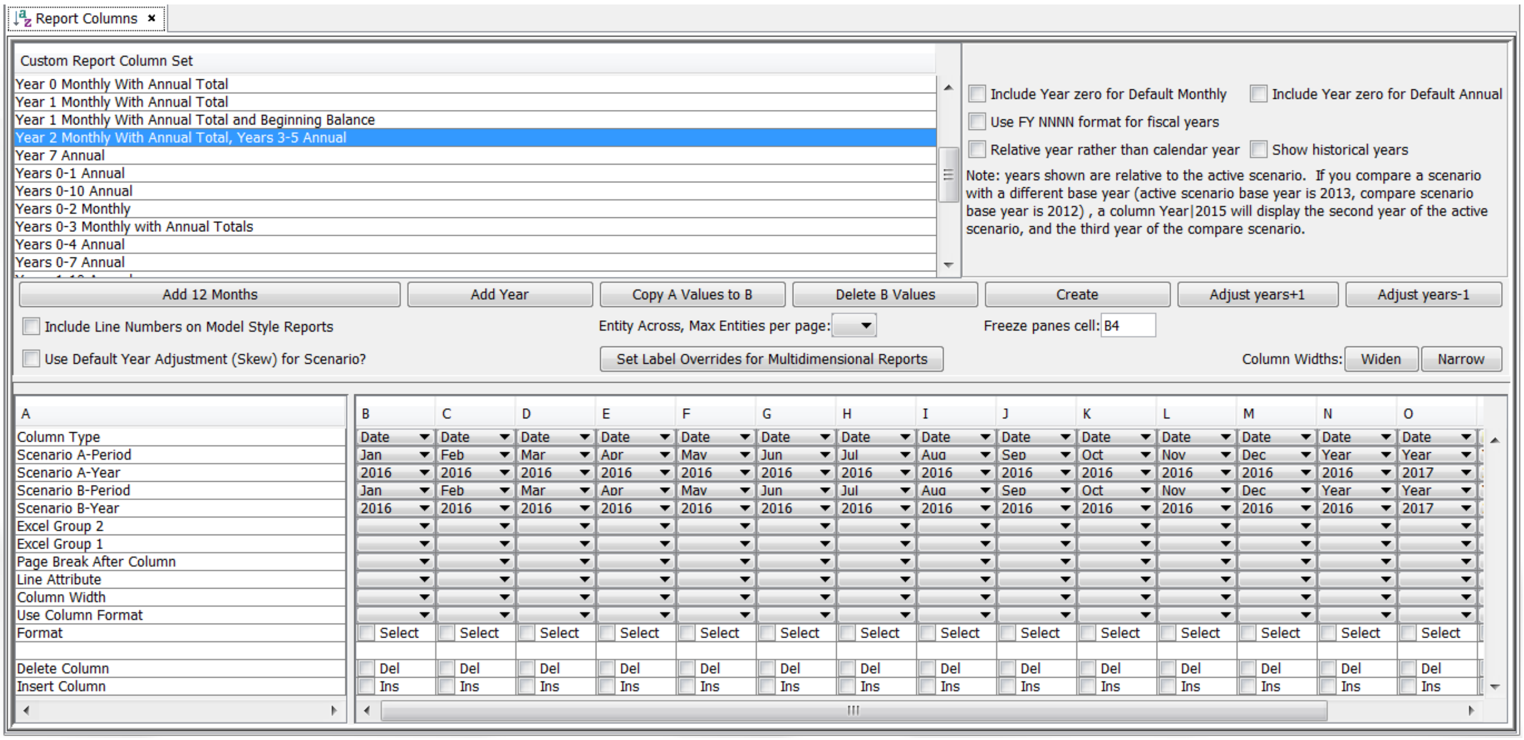


The version number is also listed in the Browse Reports data window.



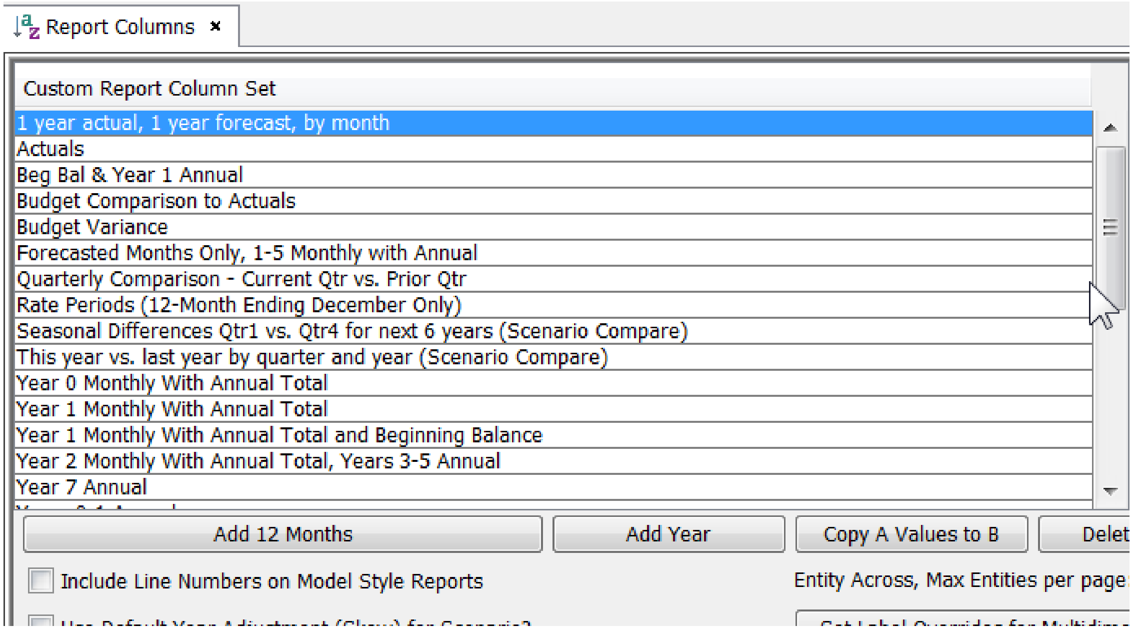
A: Detail Model 2016-2020 Base Plan	Year 2015				Year 2016			
B: Detail Model 2016-2020 Base Plan - Cut O&M	Scen A	Scen B	Dif (A-B)	% Dif (A-B...	Scen A	Scen B	Dif (A-B)	% Dif (A-B...
Chicago Electric								
Operating Revenue:								
Electric Revenue	**$5,024,157**	**$5,024,157**	**$0**	**0.000%**	**$5,142,379**	**$5,142,379**	**$0**	**0.000%**
Gas Revenue	0	0	0		0	0	0	
Affiliate Revenue	0	0	0		0	0	0	
Goal Seek Revenue	0	0	0		0	0	0	
Total Operating Revenue	**$5,024,157**	**$5,024,157**	**$0**	**0.000%**	**$5,142,379**	**$5,142,379**	**$0**	**0.000%**
Operating Expenses:								
Fuel	2,219,119	2,219,119	0	0.000%	2,285,693	2,285,693	0	0.000%
Purchased Power	150,269	150,269	0	0.000%	154,778	154,778	0	0.000%
Cost of Gas Sold	0	0	0		0	0	0	
Operations and Maintenance	739,114	711,884	27,231	3.684%	766,219	731,784	34,435	4.494%
Goal Seek O&M	0	0	0		0	0	0	
Depreciation, Decommissioning & Amortizations	493,539	493,539	0	0.000%	496,696	496,696	0	0.000%
Taxes Other Than Income Taxes	150,978	150,978	0	0.000%	154,451	154,451	0	0.000%
Total Operating Expenses	**$3,753,020**	**$3,725,789**	**$27,231**	**0.726%**	**$3,857,836**	**$3,823,401**	**$34,435**	**0.893%**

Report Columns



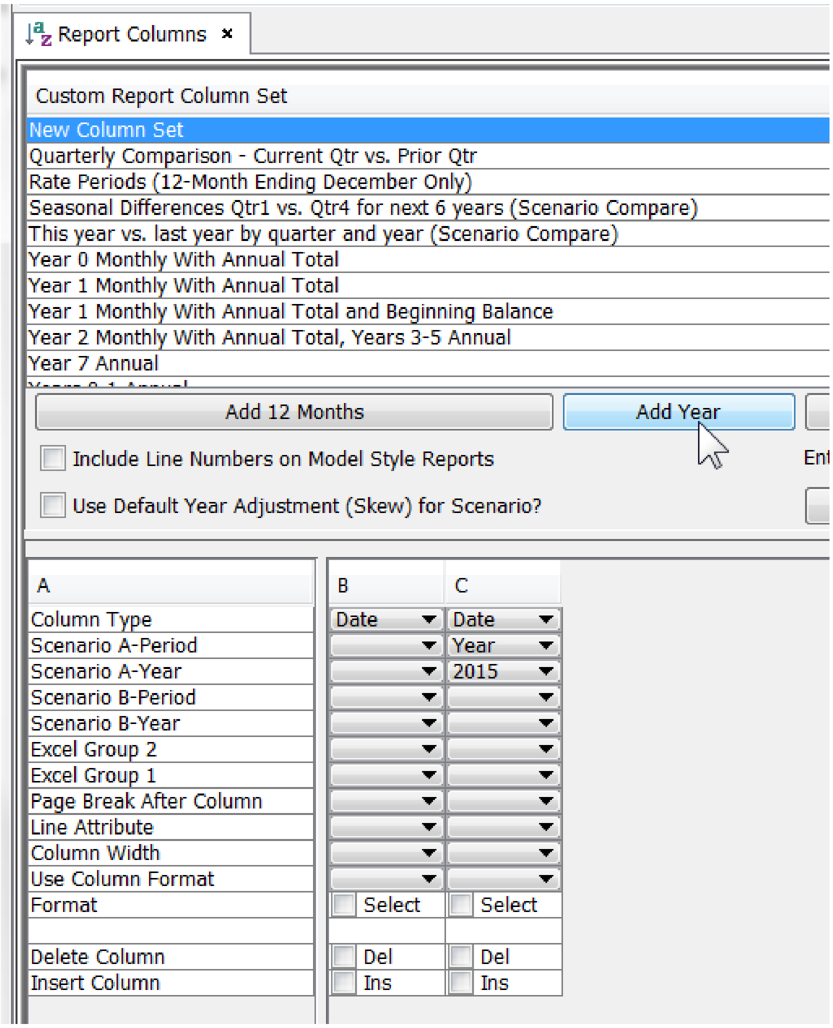
Reporting in UIPlanner is extremely flexible, allowing users to select among a wide variety of time settings. The system contains a number of built-in column sets, such as Default All Time - Monthly and Default All Time – Annual. These column sets correspond to the run settings for the current scenario, and they are automatically available to all users.

UIPlanner also allows users to define their own column sets, using the Report Columns screen. Users can easily add columns for years, months, or quarters. Users can also select from a number of additional column types, such as formulas, allocation references, or codes. Dates are indexed to the start year of the scenario, so when the scenario is rolled over, column sets will be automatically adjusted to follow. Below is a set of user-defined column sets, showing the wide variety of column sets that can be built. Note that these use-defined column sets are available to all users, in both the Model and Pivot Reporting.



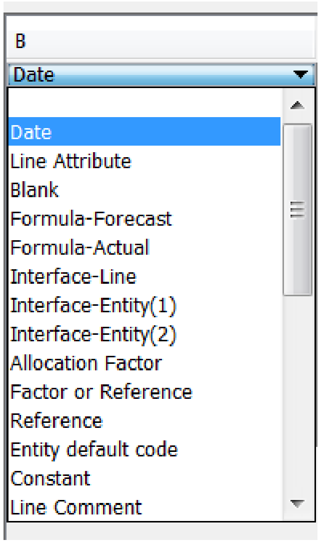
Create a New Column Set

To create a new column set, the user hits the create button. This will create a blank column set. The user can then add or delete columns as needed. Note the buttons to add a year and to add 12 months.



Column Display Options

For the column display, there is a wide variety of options beyond the typical Month or Year (Date).



Modifying Existing Column Sets

Users can also modify existing column sets as needed, by selecting them in the active list. One key capability of the screen is that the user can select a column set and globally shift the years using the Adjust Years button.

Scenarios and Cases

Data in UIPlanner is maintained in a structure of Scenarios and Cases. Cases are specific collections of data, each with a defined purpose and set of information. A scenario is a collection of cases, along with various settings such as the time horizon. Taken together, the cases build the data and business logic that drives the scenario. In UIPlanner, a user chooses a specific scenario in which to perform analysis, and the UIPlanner code pulls together all of the various cases that make up that scenario. UIPlanner then runs the scenario according to the settings defined by the user.

Cases

Cases are the building blocks of UIPlanner scenarios.

- Business logic – Formula cases
- Attributes of entities and various settings – Attribute cases
- Monthly numerical data – Time Data cases
- Historical numerical data – Actuals cases
- Company and departmental hierarchies – Tree cases
- Mapping codes for translating external data – Interface cases
- Settings that cross all scenarios (e.g., security) – Zero case

See Case Types for more information.

Scenario Settings

In addition to identifying which cases make up a scenario, each scenario also has various use-defined settings that direct the processing of that scenario. These include:

- Time settings – Start year, years to run and actuals date
- Related scenarios – links to other scenarios for sharing results
- Scenario attributes – flags that export or publishing of results, or server side processes

See Scenario Settings for more information.

Scenario Types

UIPlanner has four different scenario types. Below are general descriptions of the scenario types

- Financial Model – runs business logic through iterative sequences and produces income statements by Planning Entity
- Budget (multidimensional) – runs business logic over datasets that can have multiple dimensions, such as code block elements. May include departmental trees for building and approving budgets.
- Customer Revenue – processes customer level data across tariffs, and can summarize that data to roll-up entities such as rate schedules/rate classes. The financial model engine and budget/multidimensional engine can both also be run in Customer Revenue scenarios..
- Strategic – processes financial statements at a summarized level, using data from related Detail Model scenarios

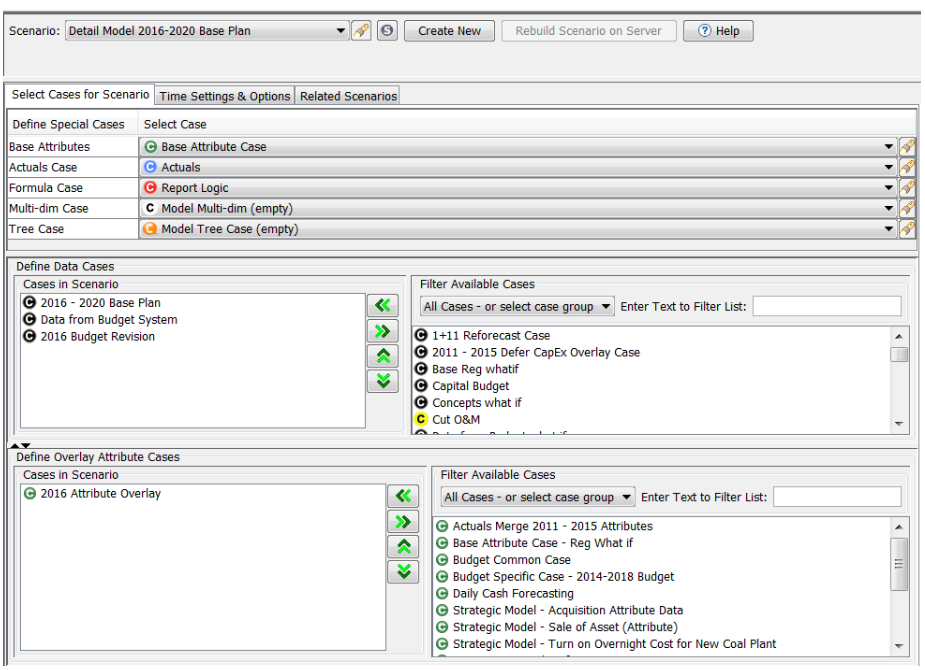
When a scenario is set as a specific type, that directs things such as how it processes the business logic and what case types it uses. See Scenario Types for more information

Scenario Example

The case/scenario construct can be thought of as a recipe.

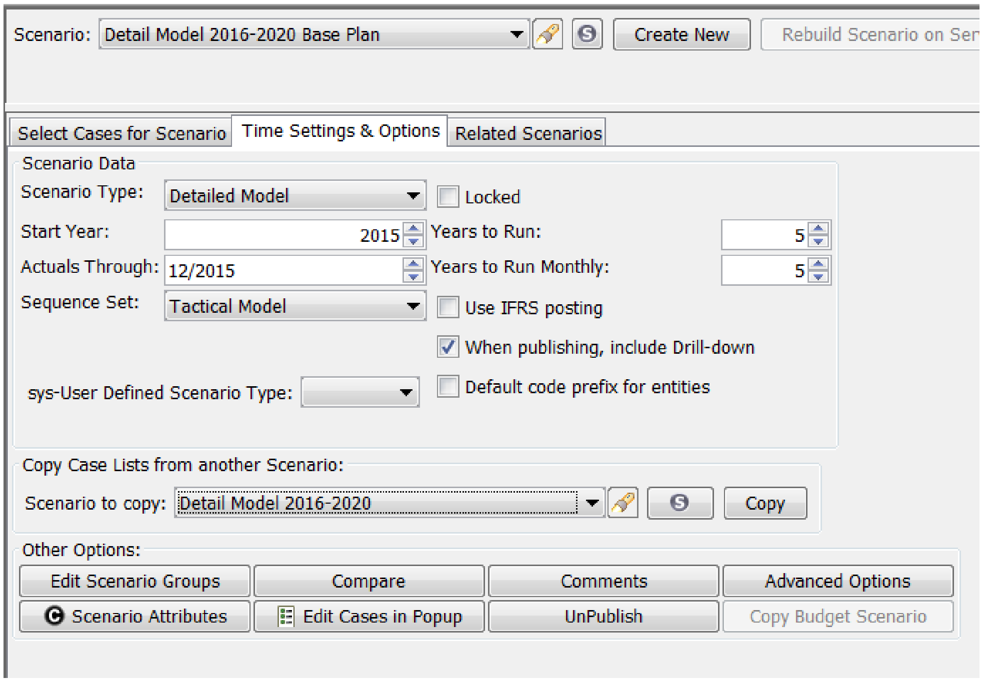
The cases are the ingredients.

- Some cases (the special cases) may be required ingredients, such as the Base Attribute case and the Formula case.
- Users can swap out ingredients or add additional ingredients (the available cases).



The scenario settings are the instructions. In the example below,

- The Start Year and Actuals Through give instructions on when to start
- The Years to Run and Years to Run Monthly are how long to bake.
- There may be additional instructions in the Related Scenarios and Advanced Options tabs.



Scenario Types

UIPlanner software supports multiple types of implementations. Below is additional information on the four scenario types. Each of these has different case structures. However, note that despite the differences, all scenarios are required to have these cases:

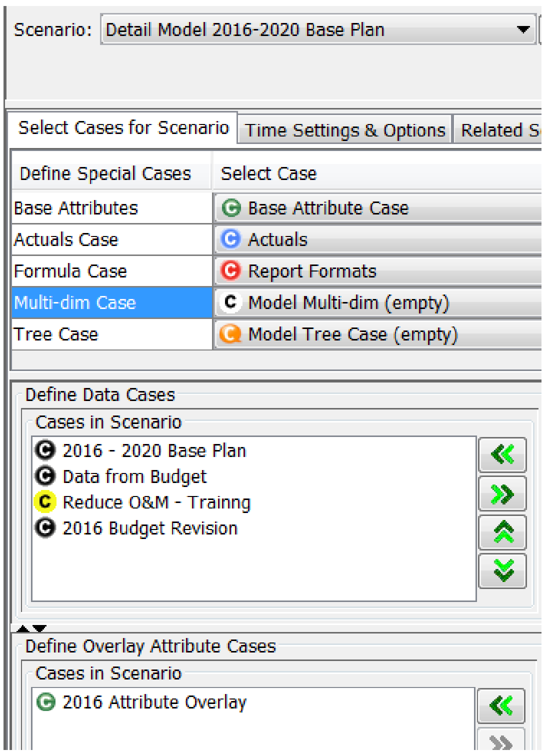
- Base Attribute
- Formula
- Data – some form of cases to hold numeric data, whether it is multidimensional data or time data
- Actuals

Early on in the development of UIPlanner there were distinct differences between the different scenario types, and certain capabilities were only available to certain types. However, as UIPlanner has evolved, many capabilities have been enabled across scenario types. For example, Detail Model scenarios can now run Multidimensional rule sets.

Tagging a scenario as a specific type does not generally disable menu items or capabilities that are not germane to that type. There are some exceptions – certain Customer Revenue menu items are only accessible from within a Customer Revenue scenario. Typically, the system administrator will use Manage Menus to turn off menu items not relevant to the current scenario type.

Detailed Model

Below is a typical case structure for a Financial Model scenario. Note that it has several attribute cases, and more than one Attribute case and several Time data cases. These facilitate the winner logic that enables the what-if and scenario comparisons that are part of the model's power.



Notes

- Actuals – some model implementations will choose to have all historical data in an overlay case rather than in the Actuals case. This is enabled through a Planner Property. In these cases, the model will use an empty Actuals case.
- Tree cases - the model does not use a Tree cases. It can be left blank or (more commonly) the model will use an empty tree case.

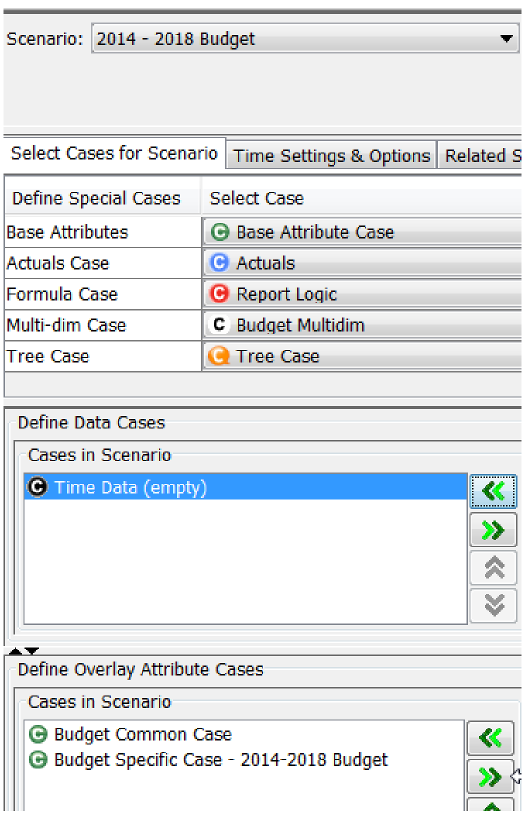
- Multidim Cases – a Detail Model may use a multidimensional case.
- Time Data – Budget scenarios do not need Time Data. The scenario can use an empty case.

When a scenario is tagged as a Detail Model scenario, this enables certain features that are key to the Financial Model, including:

- Planning Ledger
- Postings to Ledger
- Browse Reports
- Financial Model Sequences
- Publish Compare

Budget

Below is a typical case structure for a Budget scenario, which is a specific type of multidimensional scenario.



Budget scenarios typically have three Attribute cases. This structure is key to budget implementations, as it controls which attributes are shared across all scenarios or just budget scenarios

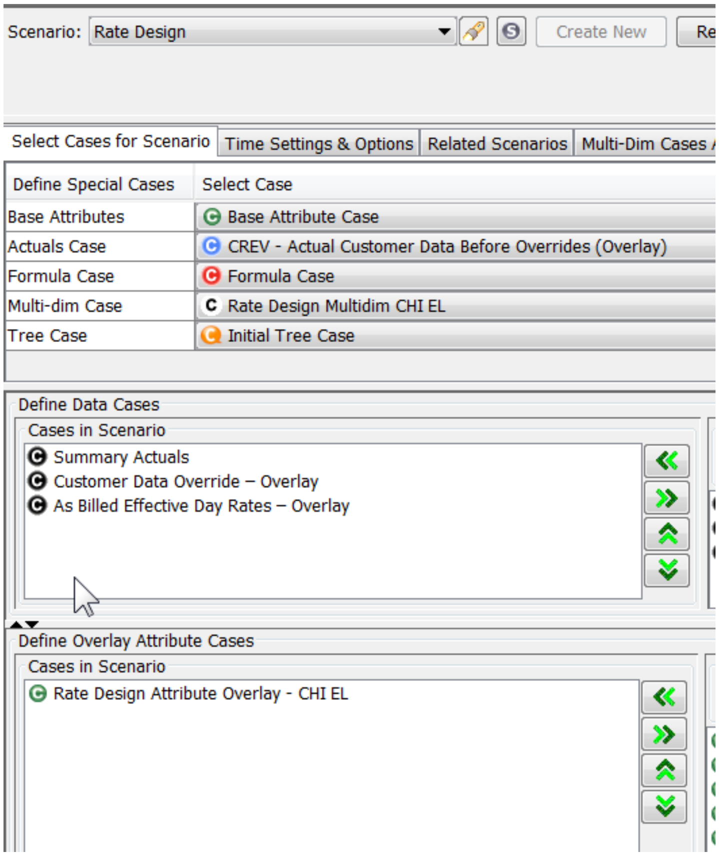
- Base Attribute
- Budget Common Attribute
- Scenario Specific Attribute

When a scenario is tagged as a Budget scenario, this enables various features that are key to multidimensional implementations or budgeting, including

- Browse Departments
- Define Grid Instances
- Data Import
- Budget Grid
- Project Grid

Customer Revenue

Customer Revenue scenarios are a particular variant of a multidimensional scenario. When a scenario is tagged as Customer Revenue, it enables processing capabilities for importing and running over large numbers of customers by account/premise. Below is a typical case structure for a Customer Revenue scenario.



Note the additional Time Data cases for processing Customer Level overrides or Effective Day rates.

CREV scenarios can also have overlay Attribute cases. In the example above, the scenario includes an overlay case for an alternative rate structure.

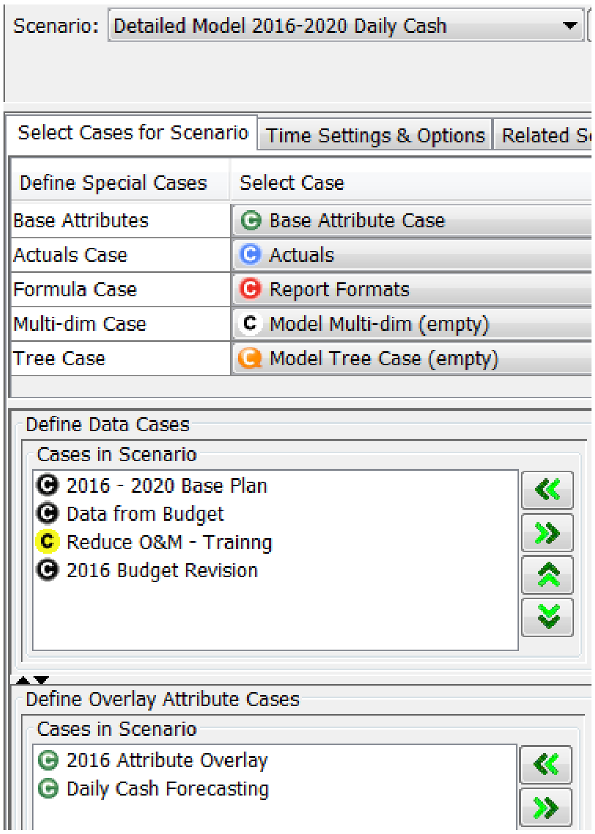
When a scenario is tagged as a Customer Revenue scenario, this enables various Customer Revenue features, such as the following:

- Administer Customer Revenue Module
- Run Customer Revenue Model
- Customer Revenue Task functions
- Linked Concepts
- Load and Run all Customer Sequences

These and other Customer Revenue specific menu items are only accessible from within a Customer Revenue scenario.

Daily Cash Flow

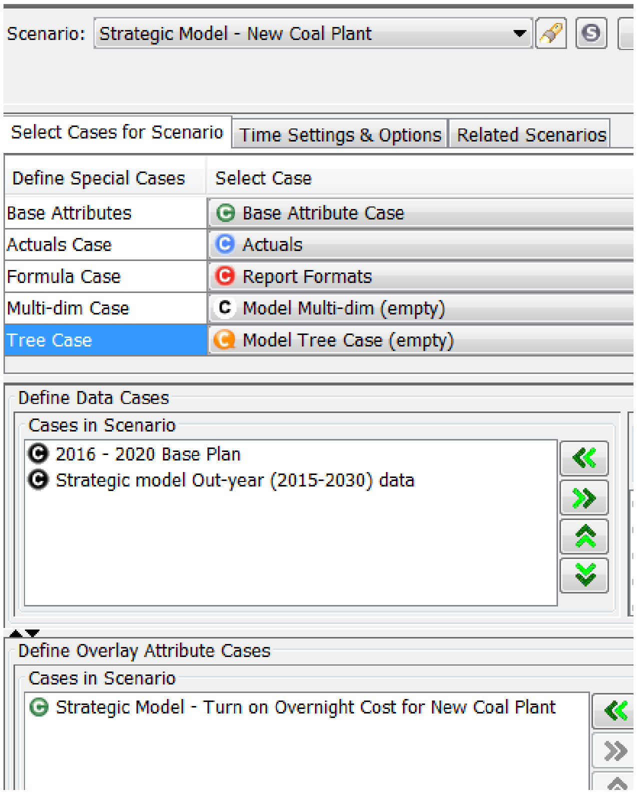
Daily Cash Flow scenarios are a particular variant of Detailed Model. When a scenario is tagged as Customer Revenue, it can use additional logic to split the monthly financial model data by day. Below is a typical case structure for a Daily Cash scenario.



When a scenario is tagged as a Daily Cash scenario, this enables the Daily Cash functionality. Note the additional Attribute case - this holds the Daily Cash settings.

Strategic Model

A Strategic Model scenario is a variant of a Financial Model scenario that runs financial model logic over data summarized from related Financial Model scenarios. Below is a typical case structure for a Strategic Model scenario.



The summarized strategic model data is stored in an additional time data case, and overlay attribute cases can be used to implement what if scenarios.

The Strategic Model is linked to the related Financial Model scenario using the Advanced Options tab in Manage Scenarios.

Scenario Settings

Each scenario has various user defined settings that direct UIPlanner in how to process it. These include:

- Time settings – Start year, years to run and actuals date
- Related scenarios – links to other scenarios for sharing results
- Scenario attributes – flags that export or publishing of results, or server side processes

These are set on the Manage Scenarios screen, in various tabs:

- • Time Settings and Options Tab
  - Advanced Options
  - Scenario Attributes
- Related Scenarios Tab

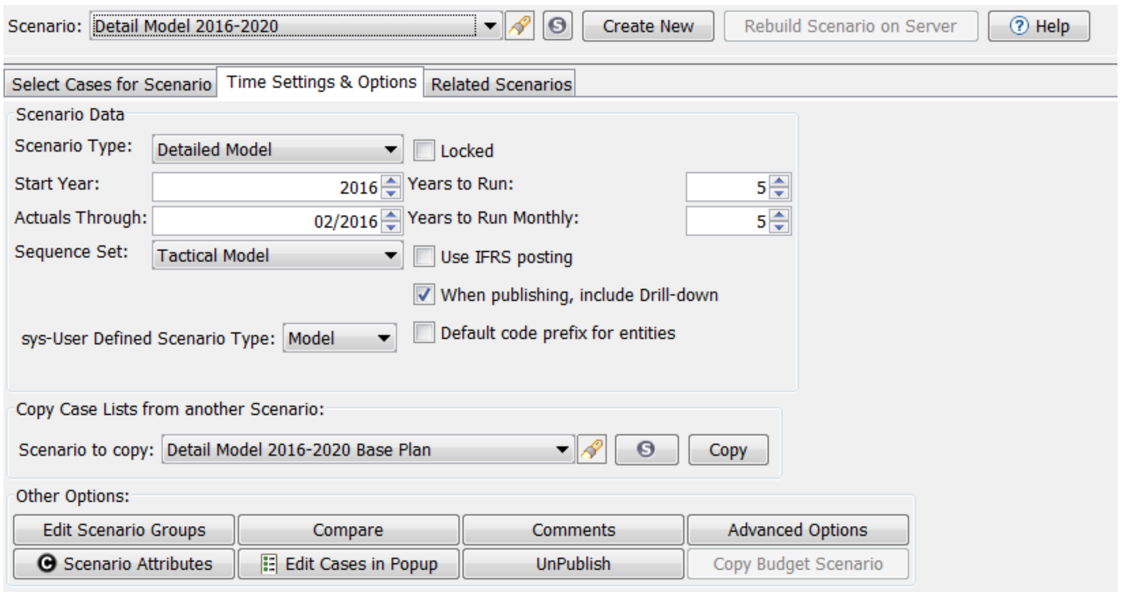
See Manage Scenarios for information on how to set these options.

Scenario Settings

- Scenario Type – Drop-down list to select the type for the highlighted scenario. Note that the type selected may determine the availability of other options on the Manage Scenarios screen
- Locked – Lock a scenario so its settings and case structure cannot be changed.
- Start Year – Set the calendar (or fiscal) year that UIPlanner will begin processing calculations.
- Actuals Through – This should be set to the date through which actuals have been loaded into the system. This date controls UIPlanner processing in a number of areas, including the following.
  - Detail Model Income Statements and Balance Sheets will show the Planning Ledger amounts for the actuals months
  - Pivot reports will indicate actuals periods
  - Various Multidimensional Task functions reference the Actuals Through date
  - The calculation editor function Last Actuals date references the Actuals Through date
- Years to Run – Total number of years for the scenario to run. Years in excess of the monthly setting below will be run annually
- Years to Run Monthly – Number of years that model reports will be run by month
- Sequence Set (Model/Strategic Model only) – select which Sequence Set is the default for this scenario.
- Use IFRS Posting - enable the IFRS option on the Posting screen. It will also enable any postings defined as IFRS to override the original posting.
- When Publishing, Include Drilldown (Model and CREV only) – when this scenario is published for Scenario Compare purposes, it will include drilldown information.

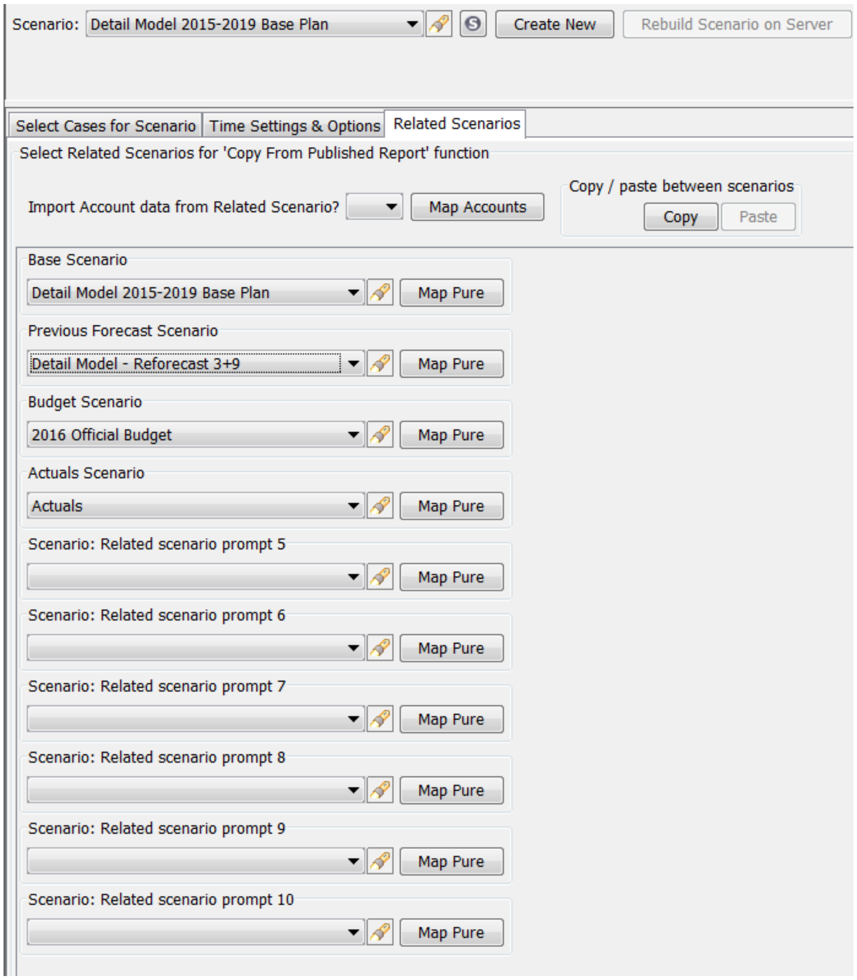
- Include in Next Data Export (Budget only) – choose whether that scenario's data will be included when the next Budget export is performed.
- Sys-User Defined Scenario Type – If these have been set up, a scenario can be associated to a sys-User Defined Scenario Type.
- Default Code Prefix for Entities – choose whether or not to display Entity Codes.

Below is an example of scenario settings for a Detailed Model scenario. This tab will be slightly different for other scenario types.



Related Scenarios

Related Scenarios are a construct that facilitates data transfer and reporting across scenarios. Once a Related Scenario prompt is set up, functions and pivot reporting setups can refer to that prompt. Then by just changing the scenario in this screen, all of those functions/reporting setups will point to the new scenario.



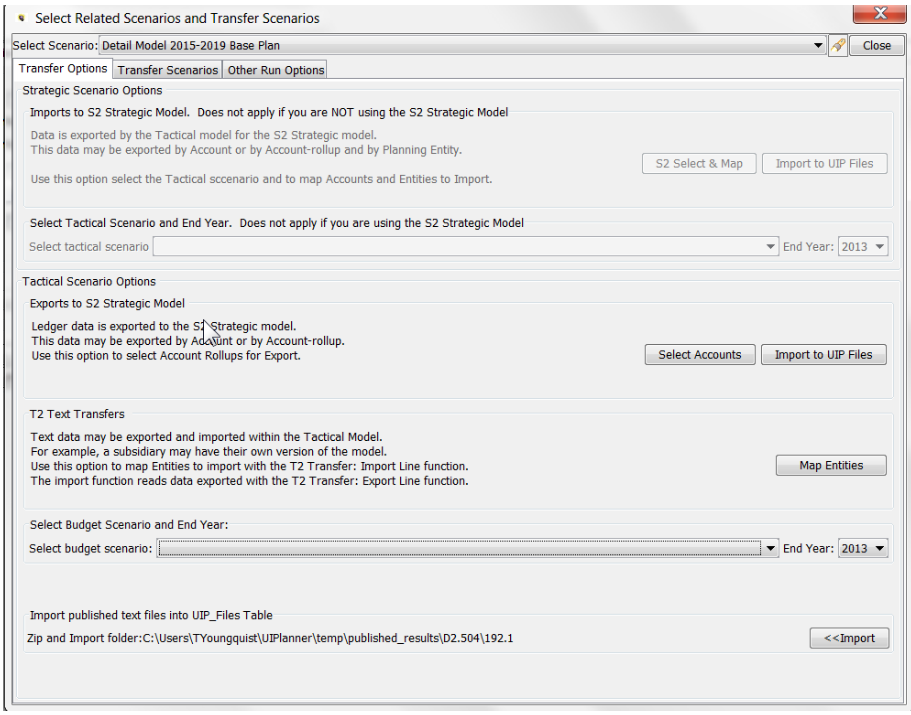
Note - Related scenarios are attached to the scenario (and stored in the zero case) rather than defined in an attribute case, since attribute cases may be shared across scenarios.

There are several other configuration settings that are relevant only for Financial Model scenarios.

- Map Pure - Within the Related Scenarios construct is the ability to take Planning Entity results from one related scenario and map them to a Pure Input sub in the current scenario.
- Import Account Data from Related Scenario - Users can flag a related scenario to copy account data into the selected scenario. This requires mapping accounts from one to the other.
- Copy/Paste Between Scenarios - Users can select account data from one scenario and paste it into another scenario

Transfer Options

The Transfer Options tab has two regions, one governing the Strategic Model and the other related to the Financial (Tactical) Model.



Strategic Scenario Transfer Options

When using Strategic Model scenarios, the user needs to configure pointers to the related Tactical model.

- S2 Select and Map – Map accounts and planning entities from the Financial Model to Strategic model.
- Import to UIP_Files - Published S2 Transfers can be imported into the UIP_Files table. This simplifies the S2 Transfer process, as it allows the System Administrator to control when to import transfer data, and model users no longer need access to a network folder holding the transfer files. Note that the Planner Property needs to be set to allow this.

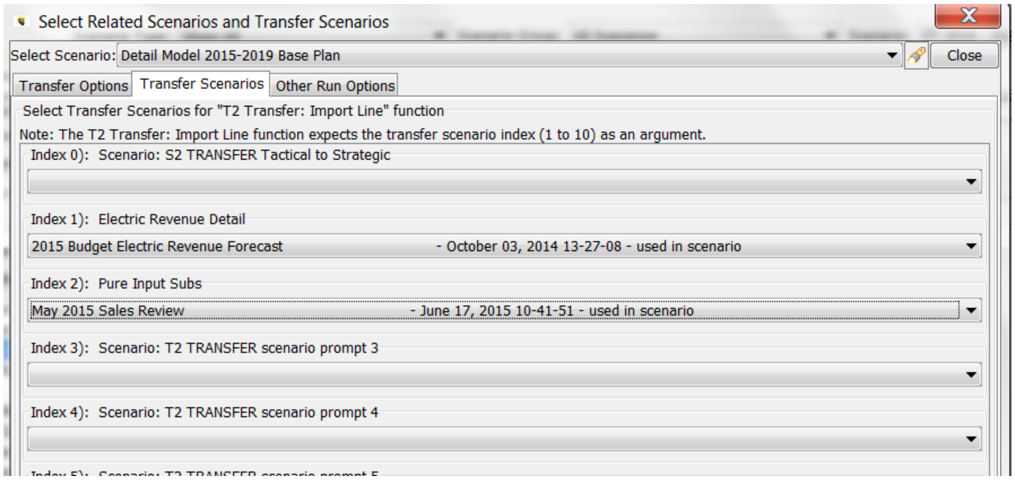
Tactical Scenario Transfer Options

Users can transfer data between Financial Model scenarios or from Financial Model to the Strategic Model.

- T2 Text Transfers – Map Entities. Map entities for transfers between Financial Model scenarios.
- Import Published Text Files into UIP_Files Table – Published T2 Transfers can be imported into the UIP_Files table. This simplifies the T2 Transfer process, as it allows the System Administrator to control when to import transfer data, and model users no longer need access to a network folder holding the transfer files. Note that the Planner Property needs to be set to allow this.
- Select Budget Scenario and Year – If data is transferred from a Budget Scenario to the Financial Model using T2 Transfers, select the scenario, and set the Budget Year.
- Exports to S2 Strategic Model – Ledger data can be exported by Account or Account Rollup. Map Account Rollups for transfer to the Strategic Model.

Transfer Scenarios

This tab is used set Transfer Scenarios, for both S2 Transfers and T2 Transfers.

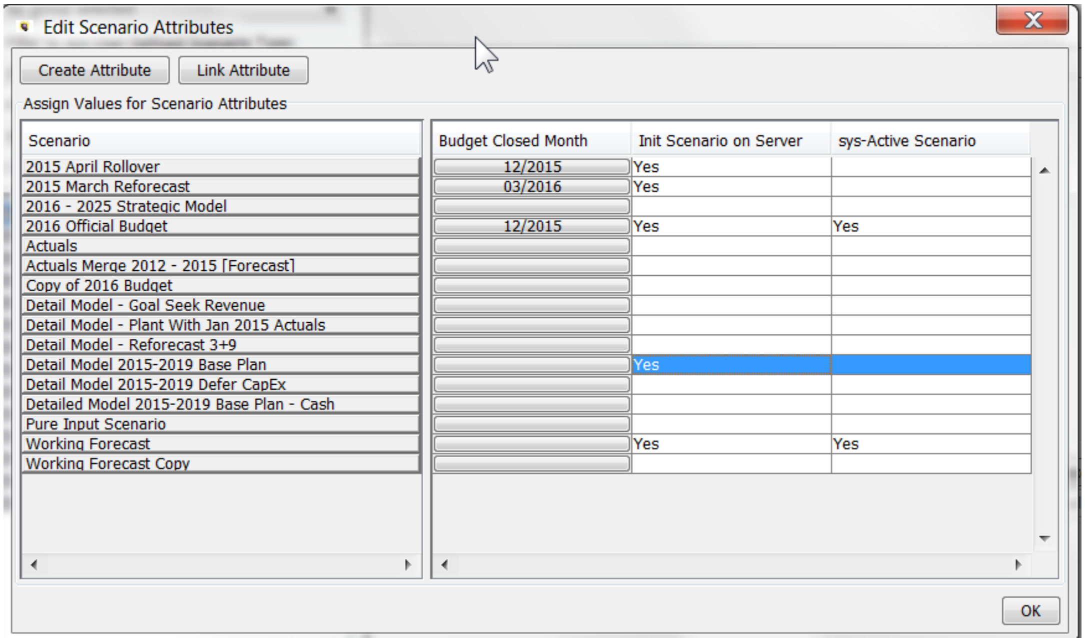


The labels for the transfer scenarios are assigned using the Core Object Editor (Q2 – S2/T2 Transfer Scenario: Comment Description)

Scenario Attributes

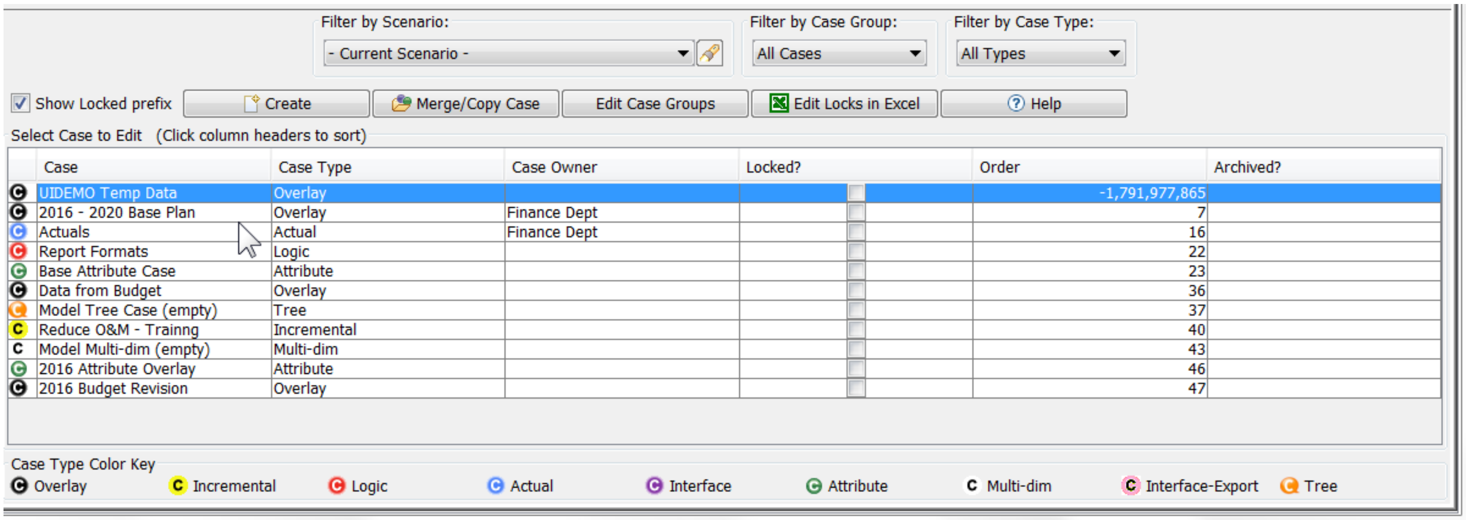
The Scenario Attributes dialog lists all attributes for all scenarios. It provides a single point for managing all scenario attributes. Scenario Attributes allow System Administrators to control processes across multiple scenarios, such as loading scenarios upon server start-up. Among the commonly used Scenario Attributes are:

- Sys-Active Scenario – this tags the scenario so that selected multi-dim rule sets are run on server startup (middle tier only)
- Sys-Init Scenario on Server - to indicate server-side scenario initialization upon server startup (middle tier only)
- Budget Closed Month – set the close month for budget data



Case Types

UIPlanner cases come in several different types, depending upon the type of data they contain. Each case type is described below. Below is a screen shot of the Manage Cases screen. Note the different cases in the current scenario, and note the legend at the bottom of the screen.



Filter by Scenario: - Current Scenario -
Filter by Case Group: All Cases
Filter by Case Type: All Types

Show Locked prefix | Create | Merge/Copy Case | Edit Case Groups | Edit Locks in Excel | Help

Select Case to Edit (Click column headers to sort)

Case	Case Type	Case Owner	Locked?	Order	Archived?
UIDEMO Temp Data	Overlay			-1,791,977,865	
2016 - 2020 Base Plan	Overlay	Finance Dept		7	
Actuals	Actual	Finance Dept		16	
Report Formats	Logic			22	
Base Attribute Case	Attribute			23	
Data from Budget	Overlay			36	
Model Tree Case (empty)	Tree			37	
Reduce O&M - Trainng	Incremental			40	
Model Multi-dim (empty)	Multi-dim			43	
2016 Attribute Overlay	Attribute			46	
2016 Budget Revision	Overlay			47	

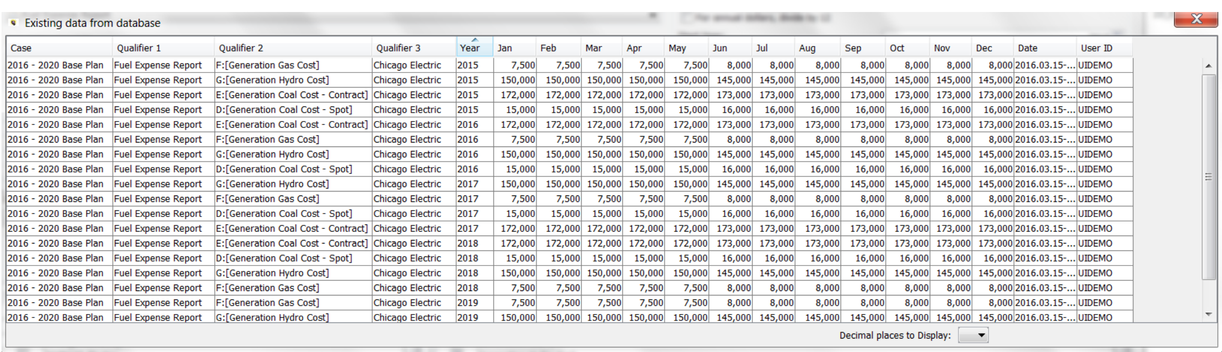
Case Type Color Key
Overlay Incremental Logic Actual Interface Attribute Multi-dim Interface-Export Tree

Time Data

Time Data in UIPlanner refers to data that can change over time, such as GWH Sales, Budgeted O&M expenses or Customer Rates. These are stored in UIPlanner by Year and 12 months across. There are several different kinds of time data cases.

Time Data Overlay

The data in a time data overlay case will supersede the identical lines of data in other data cases above it in the case list. Below is an example of a time data case from the Financial Model.



Existing data from database

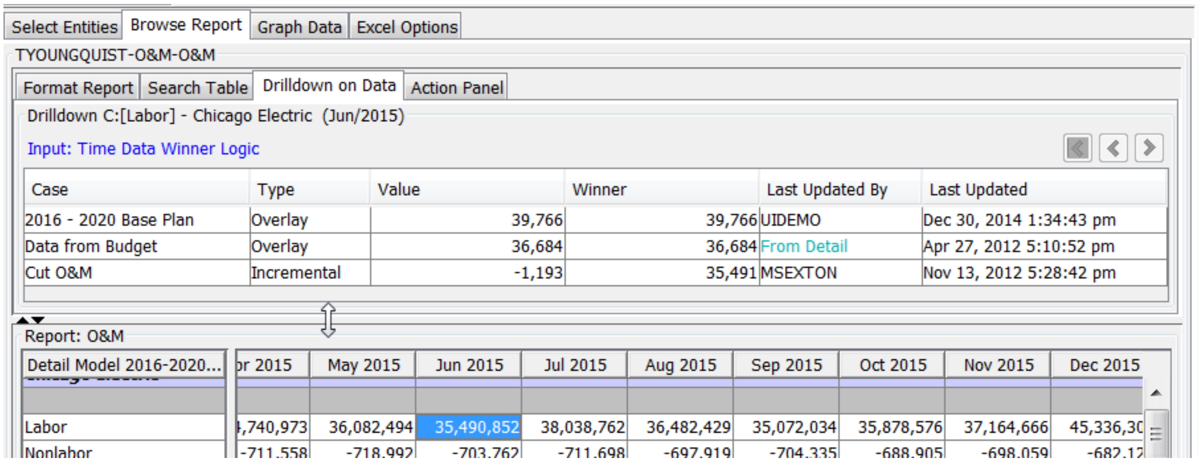
Case	Qualifier 1	Qualifier 2	Qualifier 3	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Date	User ID
2016 - 2020 Base Plan	Fuel Expense Report	F:[Generation Gas Cost]	Chicago Electric	2015	7,500	7,500	7,500	7,500	7,500	8,000	8,000	8,000	8,000	8,000	8,000	8,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	G:[Generation Hydro Cost]	Chicago Electric	2015	150,000	150,000	150,000	150,000	150,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	E:[Generation Coal Cost - Contract]	Chicago Electric	2015	172,000	172,000	172,000	172,000	172,000	173,000	173,000	173,000	173,000	173,000	173,000	173,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	D:[Generation Coal Cost - Spot]	Chicago Electric	2015	15,000	15,000	15,000	15,000	15,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	E:[Generation Coal Cost - Contract]	Chicago Electric	2016	172,000	172,000	172,000	172,000	172,000	173,000	173,000	173,000	173,000	173,000	173,000	173,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	F:[Generation Gas Cost]	Chicago Electric	2016	7,500	7,500	7,500	7,500	7,500	8,000	8,000	8,000	8,000	8,000	8,000	8,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	G:[Generation Hydro Cost]	Chicago Electric	2016	150,000	150,000	150,000	150,000	150,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	D:[Generation Coal Cost - Spot]	Chicago Electric	2016	15,000	15,000	15,000	15,000	15,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	G:[Generation Hydro Cost]	Chicago Electric	2017	150,000	150,000	150,000	150,000	150,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	F:[Generation Gas Cost]	Chicago Electric	2017	7,500	7,500	7,500	7,500	7,500	8,000	8,000	8,000	8,000	8,000	8,000	8,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	D:[Generation Coal Cost - Spot]	Chicago Electric	2017	15,000	15,000	15,000	15,000	15,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	E:[Generation Coal Cost - Contract]	Chicago Electric	2017	172,000	172,000	172,000	172,000	172,000	173,000	173,000	173,000	173,000	173,000	173,000	173,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	E:[Generation Coal Cost - Contract]	Chicago Electric	2018	172,000	172,000	172,000	172,000	172,000	173,000	173,000	173,000	173,000	173,000	173,000	173,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	D:[Generation Coal Cost - Spot]	Chicago Electric	2018	15,000	15,000	15,000	15,000	15,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	G:[Generation Hydro Cost]	Chicago Electric	2018	150,000	150,000	150,000	150,000	150,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	F:[Generation Gas Cost]	Chicago Electric	2018	7,500	7,500	7,500	7,500	7,500	8,000	8,000	8,000	8,000	8,000	8,000	8,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	F:[Generation Gas Cost]	Chicago Electric	2019	7,500	7,500	7,500	7,500	7,500	8,000	8,000	8,000	8,000	8,000	8,000	8,000	2016.03.15-...	UIDEMO
2016 - 2020 Base Plan	Fuel Expense Report	G:[Generation Hydro Cost]	Chicago Electric	2019	150,000	150,000	150,000	150,000	150,000	145,000	145,000	145,000	145,000	145,000	145,000	145,000	2016.03.15-...	UIDEMO

Decimal places to Display:

A special type of time data overlay case is the User Temp Data Case. This case allows a user to do personal what-ifs. Note that while the data will be used in the model run, other users cannot see it nor can the use publish those results. By default, this case is processed last (before the actuals case).

Time Data Incremental

The data in a time data incremental case will add to or subtract from data that is contained in other cases before it in the case list. See below



Select Entities | Browse Report | Graph Data | Excel Options

TYOUNGQUIST-O&M-O&M

Format Report | Search Table | Drilldown on Data | Action Panel

Drilldown C:[Labor] - Chicago Electric (Jun/2015)

Input: Time Data Winner Logic

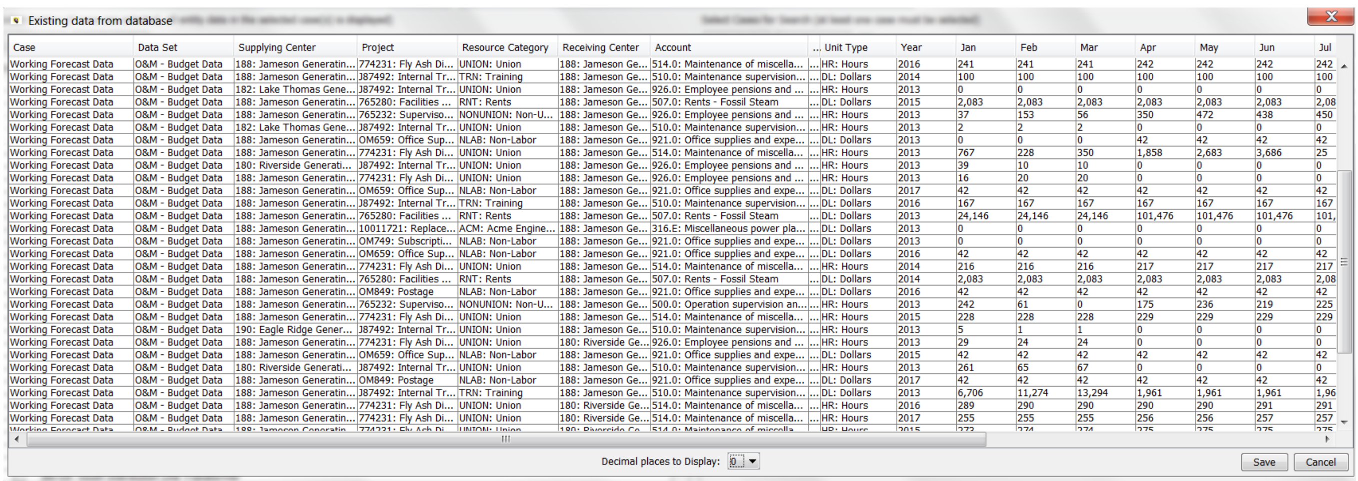
Case	Type	Value	Winner	Last Updated By	Last Updated
2016 - 2020 Base Plan	Overlay	39,766	39,766	UIDEMO	Dec 30, 2014 1:34:43 pm
Data from Budget	Overlay	36,684	36,684	From Detail	Apr 27, 2012 5:10:52 pm
Cut O&M	Incremental	-1,193	35,491	MSEXTON	Nov 13, 2012 5:28:42 pm

Report: O&M

Detail Model 2016-2020...	pr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015
Labor	,740,973	36,082,494	35,490,852	38,038,762	36,482,429	35,072,034	35,878,576	37,164,666	45,336,30
Nonlabor	-711,558	-718,992	-703,762	-711,698	-697,919	-704,335	-688,905	-698,059	-682,12

Multidimensional

Multidimensional Time Data cases also store data by Year and 12 months across, but can have multiple dimensions.



Existing data from database

Case	Data Set	Supplying Center	Project	Resource Category	Receiving Center	Account	...	Unit Type	Year	Jan	Feb	Mar	Apr	May	Jun	Jul
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	774231: Fly Ash Di...	UNION: Union	188: Jameson Ge...	514.0: Maintenance of miscella...	...	HR: Hours	2016	241	241	241	242	242	242	242
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	J87492: Internal Tr...	TRN: Training	188: Jameson Ge...	510.0: Maintenance supervision...	...	DL: Dollars	2014	100	100	100	100	100	100	100
Working Forecast Data	O&M - Budget Data	182: Lake Thomas Gene...	J87492: Internal Tr...	UNION: Union	188: Jameson Ge...	926.0: Employee pensions and ...	...	HR: Hours	2013	0	0	0	0	0	0	0
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	765280: Facilities ...	RNT: Rents	188: Jameson Ge...	507.0: Rents - Fossil Steam	...	DL: Dollars	2015	2,083	2,083	2,083	2,083	2,083	2,083	2,08
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	765232: Superviso...	NONUNION: Non-U...	188: Jameson Ge...	926.0: Employee pensions and ...	...	HR: Hours	2013	37	153	56	350	472	438	450
Working Forecast Data	O&M - Budget Data	182: Lake Thomas Gene...	J87492: Internal Tr...	UNION: Union	188: Jameson Ge...	510.0: Maintenance supervision...	...	HR: Hours	2013	2	2	2	0	0	0	0
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	OM659: Office Sup...	NLAB: Non-Labor	188: Jameson Ge...	921.0: Office supplies and expe...	...	DL: Dollars	2013	0	0	0	42	42	42	42
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	774231: Fly Ash Di...	UNION: Union	188: Jameson Ge...	514.0: Maintenance of miscella...	...	HR: Hours	2013	767	228	350	1,858	2,683	3,686	25
Working Forecast Data	O&M - Budget Data	180: Riverside Generati...	J87492: Internal Tr...	UNION: Union	188: Jameson Ge...	926.0: Employee pensions and ...	...	HR: Hours	2013	39	10	10	0	0	0	0
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	774231: Fly Ash Di...	UNION: Union	188: Jameson Ge...	926.0: Employee pensions and ...	...	HR: Hours	2013	16	20	20	0	0	0	0
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	OM659: Office Sup...	NLAB: Non-Labor	188: Jameson Ge...	921.0: Office supplies and expe...	...	DL: Dollars	2017	42	42	42	42	42	42	42
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	J87492: Internal Tr...	TRN: Training	188: Jameson Ge...	510.0: Maintenance supervision...	...	DL: Dollars	2016	167	167	167	167	167	167	167
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	765280: Facilities ...	RNT: Rents	188: Jameson Ge...	507.0: Rents - Fossil Steam	...	DL: Dollars	2013	24,146	24,146	24,146	101,476	101,476	101,476	101,
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	10011721: Replace...	ACM: Acme Engine...	188: Jameson Ge...	316.E: Miscellaneous power pla...	...	DL: Dollars	2013	0	0	0	0	0	0	0
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	OM749: Subscripti...	NLAB: Non-Labor	188: Jameson Ge...	921.0: Office supplies and expe...	...	DL: Dollars	2013	0	0	0	0	0	0	0
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	OM659: Office Sup...	NLAB: Non-Labor	188: Jameson Ge...	921.0: Office supplies and expe...	...	DL: Dollars	2016	42	42	42	42	42	42	42
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	774231: Fly Ash Di...	UNION: Union	188: Jameson Ge...	514.0: Maintenance of miscella...	...	HR: Hours	2014	216	216	216	217	217	217	217
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	765280: Facilities ...	RNT: Rents	188: Jameson Ge...	507.0: Rents - Fossil Steam	...	DL: Dollars	2014	2,083	2,083	2,083	2,083	2,083	2,083	2,08
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	OM849: Postage	NLAB: Non-Labor	188: Jameson Ge...	921.0: Office supplies and expe...	...	DL: Dollars	2016	42	42	42	42	42	42	42
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	765232: Superviso...	NONUNION: Non-U...	188: Jameson Ge...	500.0: Operation supervision an...	...	HR: Hours	2013	242	61	0	175	236	219	225
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	774231: Fly Ash Di...	UNION: Union	188: Jameson Ge...	514.0: Maintenance of miscella...	...	HR: Hours	2015	228	228	228	229	229	229	229
Working Forecast Data	O&M - Budget Data	190: Eagle Ridge Gener...	J87492: Internal Tr...	UNION: Union	188: Jameson Ge...	510.0: Maintenance supervision...	...	HR: Hours	2013	5	1	1	0	0	0	0
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	774231: Fly Ash Di...	UNION: Union	180: Riverside Ge...	926.0: Employee pensions and ...	...	HR: Hours	2013	29	24	24	0	0	0	0
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	OM659: Office Sup...	NLAB: Non-Labor	188: Jameson Ge...	921.0: Office supplies and expe...	...	DL: Dollars	2015	42	42	42	42	42	42	42
Working Forecast Data	O&M - Budget Data	180: Riverside Generati...	J87492: Internal Tr...	UNION: Union	188: Jameson Ge...	510.0: Maintenance supervision...	...	HR: Hours	2013	261	65	67	0	0	0	0
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	OM849: Postage	NLAB: Non-Labor	188: Jameson Ge...	921.0: Office supplies and expe...	...	DL: Dollars	2017	42	42	42	42	42	42	42
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	J87492: Internal Tr...	TRN: Training	188: Jameson Ge...	510.0: Maintenance supervision...	...	DL: Dollars	2013	6,706	11,274	13,294	1,961	1,961	1,961	1,96
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	774231: Fly Ash Di...	UNION: Union	180: Riverside Ge...	514.0: Maintenance of miscella...	...	HR: Hours	2016	289	290	290	290	290	291	291
Working Forecast Data	O&M - Budget Data	188: Jameson Generatin...	774231: Fly Ash Di...	UNION: Union	180: Riverside Ge...	514.0: Maintenance of miscella...	...	HR: Hours	2017	255	255	255	256	256	257	257

Decimal places to Display: 0 | Save | Cancel

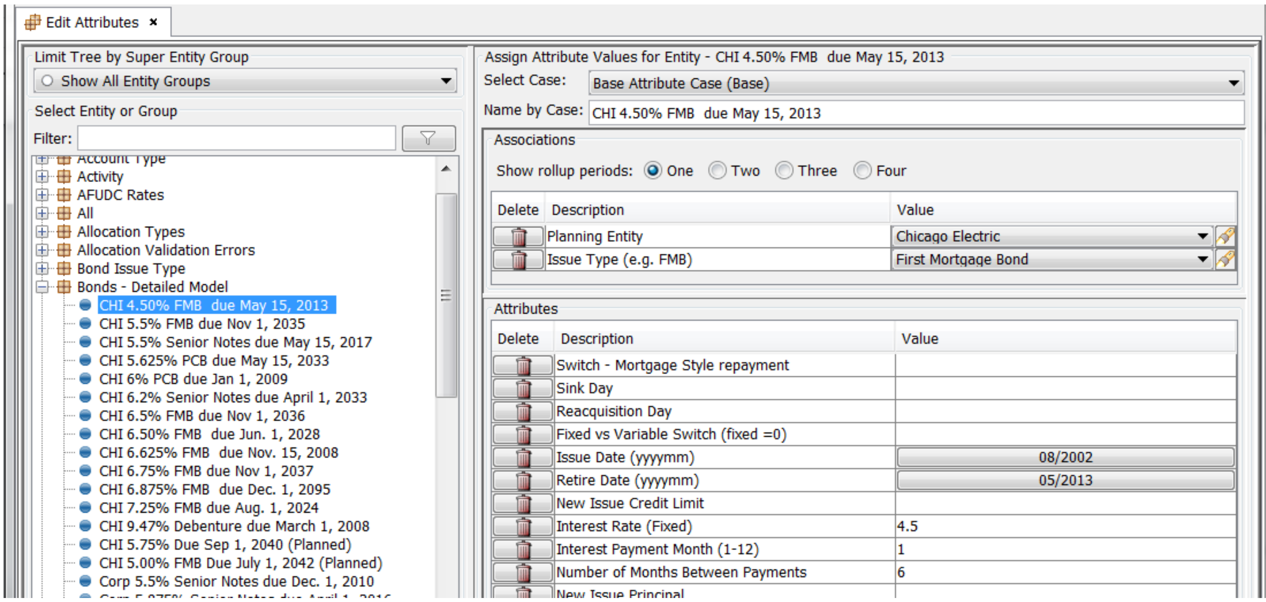
Actuals

This time data case type holds actual (historical) data, as opposed to Overlay or Incremental data cases which generally contain forecasted data. As indicated above, the Actuals case is processed last in Winner logic, except for CREV scenarios, where it is processed first.

Notes – There is a Planner Property to allow users to choose to have Actuals data in a regular Overlay case rather than in the Actuals case.

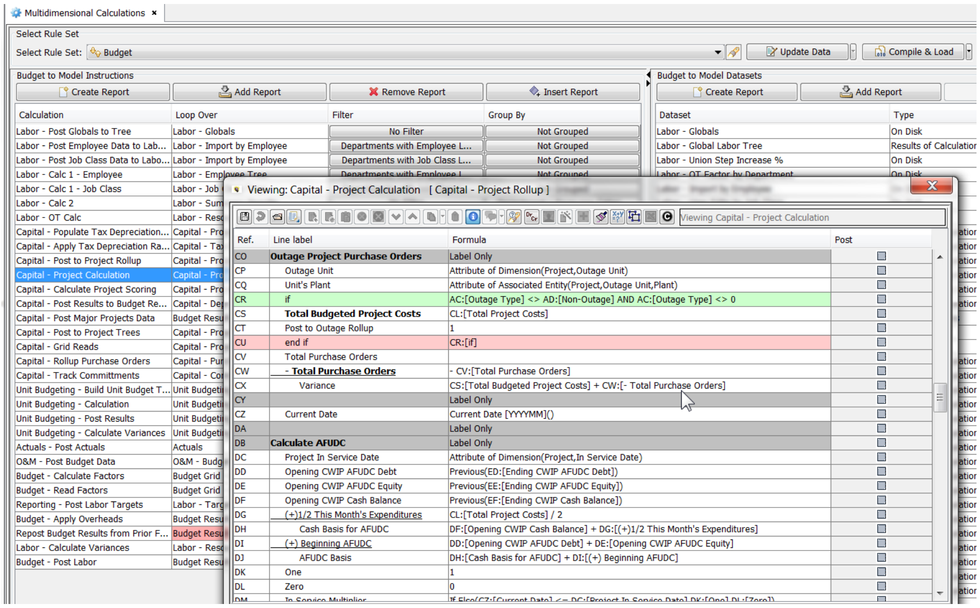
Attribute Cases

Attribute cases hold parameters and settings that generally does not change over time, such as attributes of entities (names, parameter values, associations, order, etc.), attributes of reports (line formats and postings, etc.). Each scenario contains at least one Attribute case, tagged as the Base Attribute case. Scenarios can also contain additional attribute cases – these are treated as overlays in the winner logic. Below is an example of data that is in an attribute case.



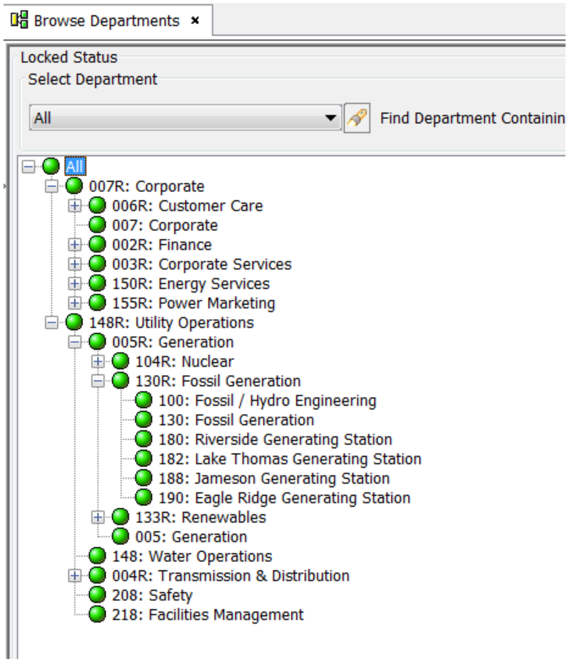
Formula Cases

The formula case stores the business logic for the calculations in UIPlanner, as well as the sequence sets and rule sets that put these calculations together in sequence sets. Only one formula case can be assigned to a scenario. Snapshotting the formula case allows the user to freeze off the logic at a point in time. Below is an example of information that is contained in the Formula Case – this is the Budget Rule set, plus all of the individual Instruction Sets and Datasets that make it up.



Tree Cases

The tree case stores the hierarchical structures that underpin both Budget and Customer Revenue scenarios. Examples of structures that are contained in the tree case for budget scenarios include departmental trees (see below), cost center trees, or project trees. For customer revenue scenarios, the tree case may contain trees for customer accounts or account reps. The tree cases are most often loaded into UIPlanner from client source systems as part of ongoing data loads to keep UIPlanner in synch with those systems.



Interface Mapping Cases

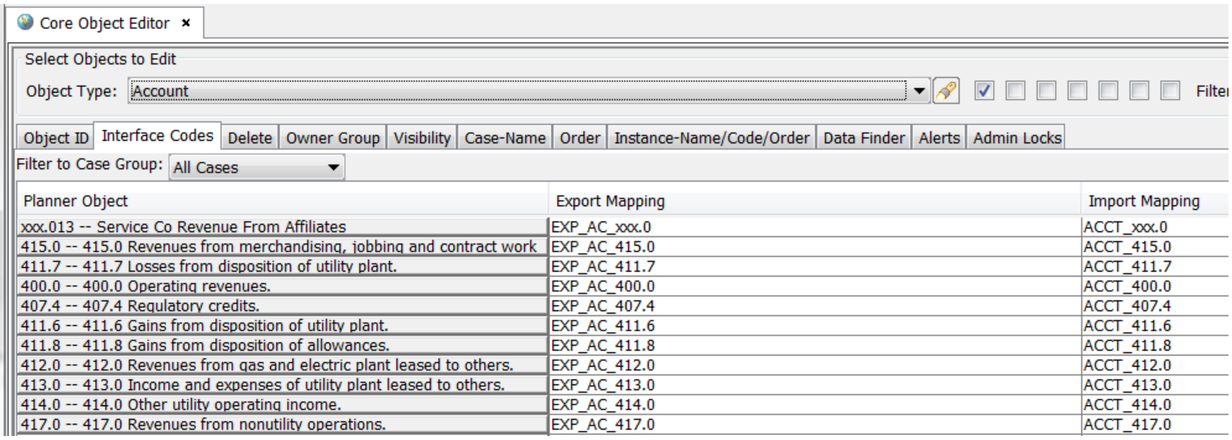
Interface mapping cases contain information used to relate UIPlanner data to external data sources. An example of mapping information would be how General Ledger accounts relate to UIPlanner Planning Ledger accounts, for use in the G/L actuals upload.

Note - Interface Cases are primarily used by the Financial Model; multidimensional scenarios and CREV scenarios have other mechanisms for importing and exporting data.

There are two kinds of Interface Cases

- Interface Cases – used for importing data. Interface codes must be unique.
- Interface-Export Cases – used for exporting data. These allow duplicate interface codes, to allow many-to-one mappings

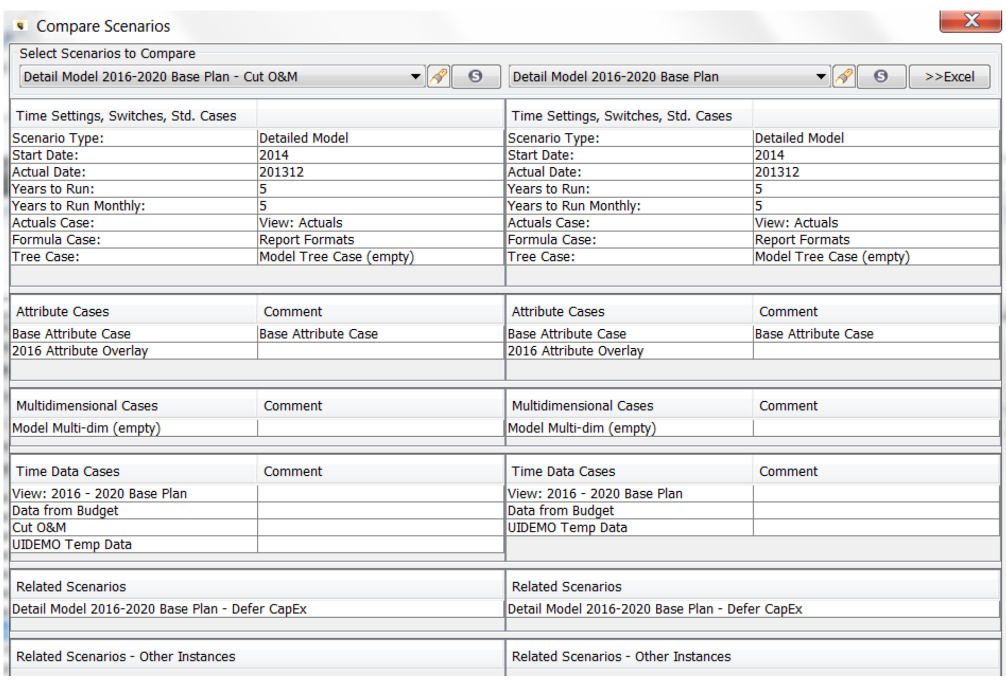
Interface Codes are viewed and edited from the Core Object Editor. Below is sample data from two separate Interface Cases.



Note that unlike the other cases types, Interface Mapping cases are not associated with one specific scenario. Interface Mapping cases are used on the Import and Export screens and are available to any Financial Model scenario at run time.

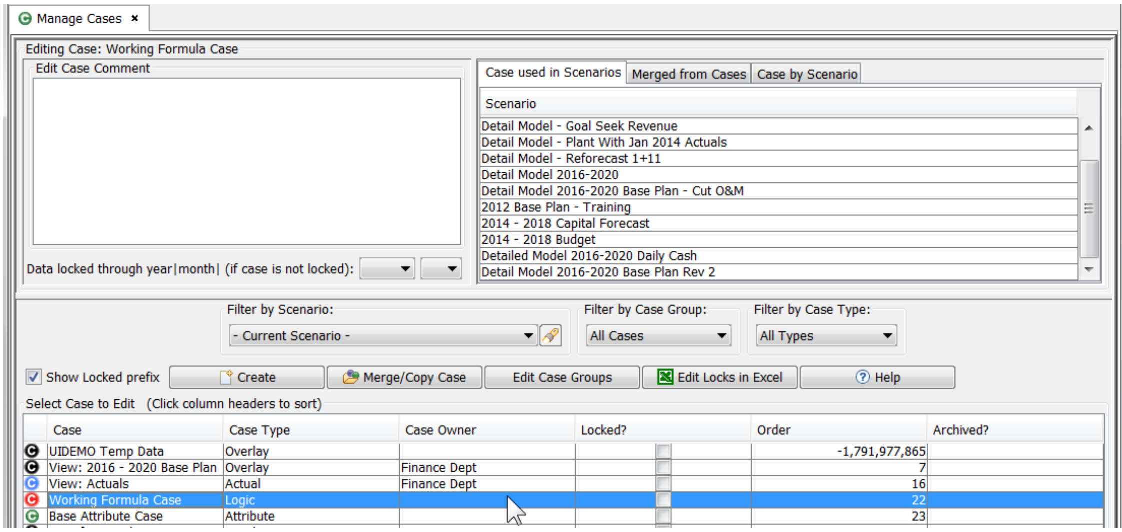
Sharing Cases

Cases can be used in multiple scenarios. This is analogous to the scenarios 'sharing' that case. As an example, the two scenarios below share all cases, except that the scenario on the left has one additional time data case. What this means is that the results of the two scenarios will differ directly as a result of the one additional case. This will be shown in the results scenario compare reports in Browse Results.



Note that this structure also makes for efficient data storage, since that data exists in UIPlanner only once, even though it is used across multiple scenarios.

Below is an example of how a single case can be used in multiple scenarios. The Working Formula case is used in many scenarios, including Financial Model, Budget and Daily Cash. What this does is ensure that all scenarios use the same business logic.



Winner Logic

Much of the power and flexibility of UIPlanner's scenario and case structure stems from its use of Winner Logic. Essentially, winner logic allows the user to have data in one case that supersedes another, and by ordering the cases, this direct UIPlanner to use one or the other. Case winner logic is applied to cases of the same type (i.e., data or attribute) in a scenario. The winner logic is applied as UIPlanner loads the data, in the order that the cases are listed in the scenario. In assembling a scenario, the user decides the order of the cases, and therefore how the final amounts to be determined.

Winner logic does not apply to the Formula case or Tree cases, as a given scenario can have only one of each of these cases.

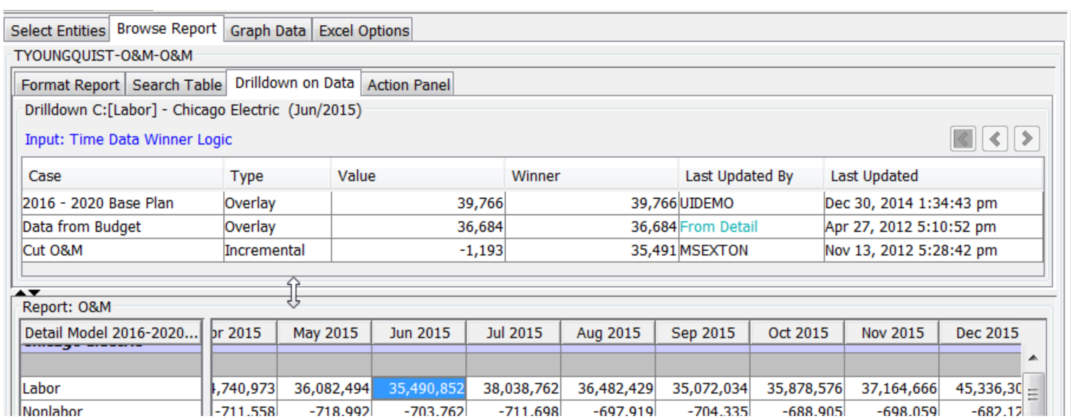
Winner logic is also relevant when merging cases. In the Manage Cases screen, when the user chooses to merge several cases into one, UIPlanner goes through the winner logic process in determining the final values in the merged case. This applies to Time Data cases as well as Attribute cases. However, once a case is merged, only the final winner amount is shown.

Data Case Winner Logic:

Below the rules related to winner logic specifically as it applies to Time Data cases.

- Data cases are processed in order from top to bottom according to the list shown on the Manage Scenarios screen.
- Data in an Overlay case supersedes ("wins over") data in previous cases (higher in the list). If no data existed before, the new value is used. If the Overlay case contains nothing (null), there is no data to overlay, the previous data is used. Finally, if the overlay case contains a zero in a field, zero is used (zero is a valid value, as opposed to null).
- Incremental data cases are added to or subtracted from previous case winners depending on their sign. Positive numbers will be added, negative numbers will be subtracted.
- In CREV scenarios, the actuals case is processed first. In all other scenario types, the Actuals case is processed last, and Actual cases always win over all other data cases in months on or before the actuals close month.
- The User Temp Data case is by default the last case in the list. It is assumed that the user intends it to be the "winner."

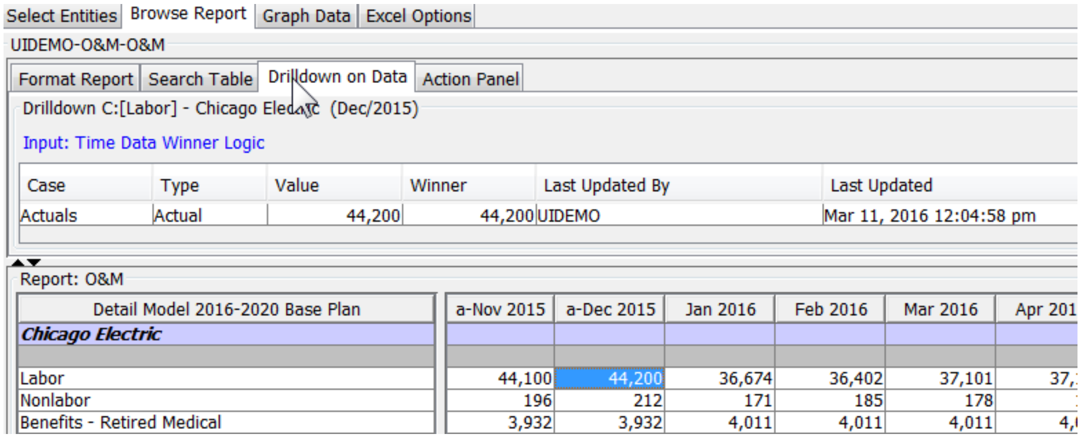
In Browse reports, drilldown back to the input Time Data row will show the results of the winner logic. Below is an example. Note the evolution of the amount in the Winner column as each case is processed, paying attention to Overlay (replace) vs. Incremental (add/subtract). The final winner amount is shown last.



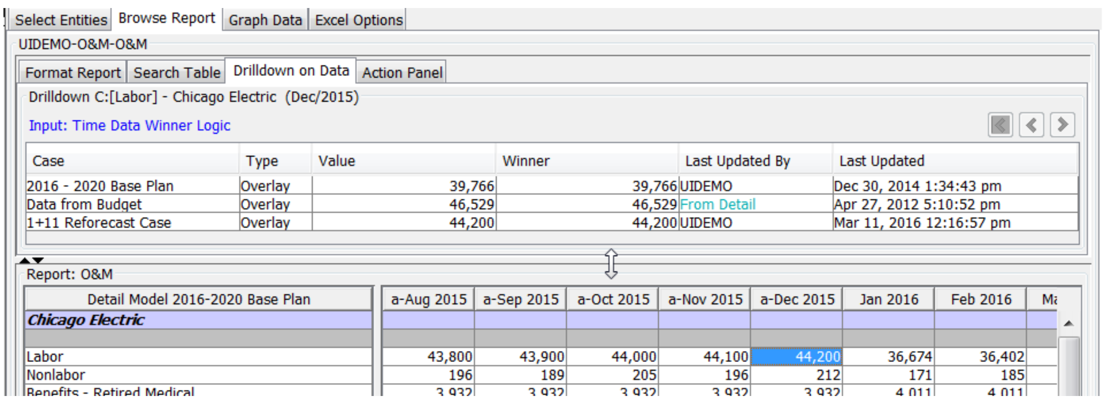
Case	Type	Value	Winner	Last Updated By	Last Updated
2016 - 2020 Base Plan	Overlay	39,766	39,766	UIDEMO	Dec 30, 2014 1:34:43 pm
Data from Budget	Overlay	36,684	36,684	From Detail	Apr 27, 2012 5:10:52 pm
Cut O&M	Incremental	-1,193	35,491	MSEXTON	Nov 13, 2012 5:28:42 pm

Detail Model 2016-2020...	pr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015
Labor	,740,973	36,082,494	35,490,852	38,038,762	36,482,429	35,072,034	35,878,576	37,164,666	45,336,30
Nonlabor	-711,558	-718,992	-703,762	-711,698	-697,919	-704,335	-688,905	-698,059	-682,12

Note that if a row is tagged as Dollars with Actuals, the drilldown in an actuals period will show only the Actuals case, as in this case the winner logic selects just that case.



Note that if a row is tagged as Dollars without Actuals, the drilldown in an actuals period will show the full winner logic. This applies to Ledger data as well.

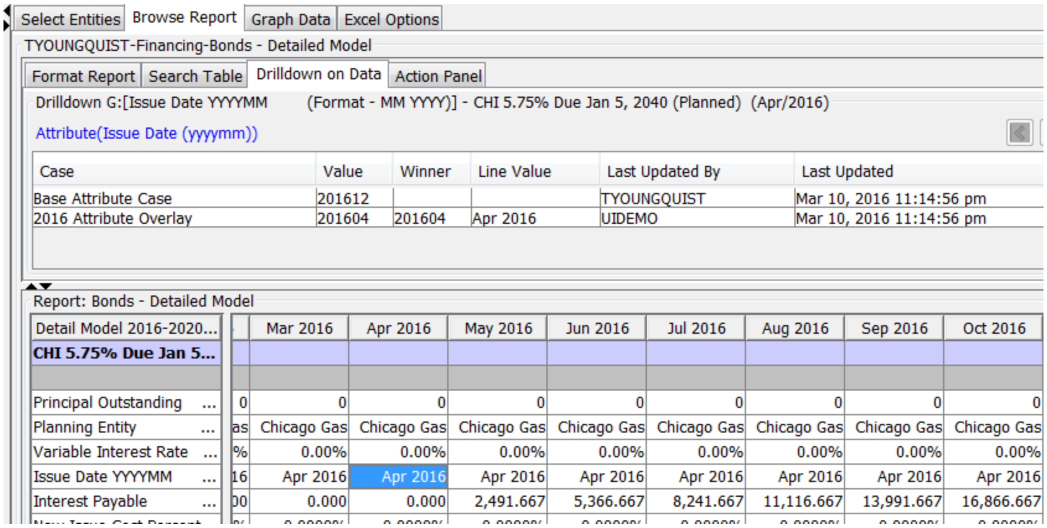


Attribute Case Winner Logic:

Below are the rules related to winner logic as it relates to Attribute cases.

- Attribute cases are processed in order according to the list in Manage Scenarios, starting with the Base Attribute case.
- Data in an overlay case supersedes ("wins over") data in previous cases (higher in the list). If no data existed before, the new value is used. If the Overlay case contains nothing (null), there is no data to overlay, the previous data is used. Finally, if the overlay case contains a zero in a field, zero is used (zero is a valid value, as opposed to null). Note – there is no such thing as an incremental attribute overlay case.

Below is an example of winner logic for attribute cases. Note the evolution of the 'winner' amount as the attribute cases are listed in order.



Interface Case Winner Logic:

Interface cases can also be processed using winner logic. While users will generally use one specific interface case when importing or exporting data, UIPlanner does provide the ability to use a special ‘on the fly’ interface case built from all existing interface cases, processed using winner logic.

Linking Scenarios

UIPlanner can be implemented in many different ways, depending upon how the client wants to manage the various modules of UIPlanner. Users can implement UIPlanner with different scenarios handing different aspects of the company’s overall planning process. These different scenarios can then be linked with one another for sharing data, logic and entities and attributes. Some of the ways in which scenarios can be linked are:

- Related Scenarios – Users can set up defined pointer relationships between scenarios, such as “Budget Scenario.” Then whatever scenario is tagged as the Budget Scenario will be used as the data source for related functions. See Manage Scenarios – Related Scenarios tab.
- Transfer Scenarios – Users can identify a scenario to be used for transferring data. See Manage Scenarios – Advanced Options tab

Scenario and Case Management

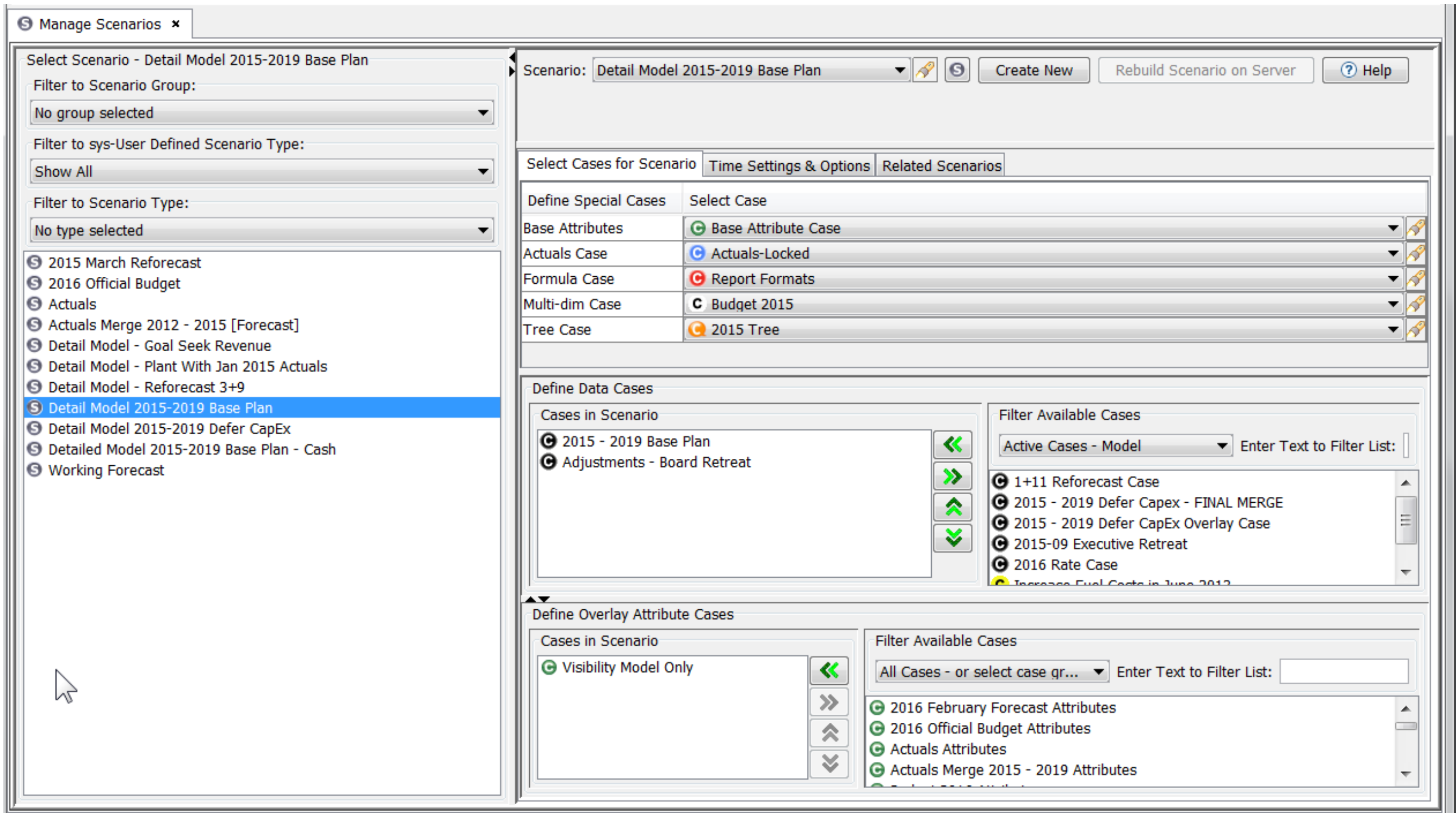
UIPlanner has very powerful scenario and case capabilities. In order to reap the maximum benefits, it is important to follow good Scenario and Case Management practices. This includes

- Establishing a naming convention for cases and scenarios
- Establishing rules and guidance for what data is stored in what case
- Having administrative control over who can create or delete scenarios and cases
- Having a snapshotting/locking process to preserve key scenarios
- Have a process for deleting or hiding unused or obsoleted scenarios.

UIPlanner includes two user tools to facilitate copying/snapshotting scenarios

- New Scenario Wizard – walks users through the steps needed to create a new scenario off of an existing one, including copying key cases.
- Define New Scenario Wizard Scheme – allows users to set up rules for creating a scenario off of a given template. This can then be launched from a switchboard.

Manage Scenarios



The Manage Scenarios screen is used to view and/or configure scenarios in UIPlanner. Since scenarios are essentially collections of cases, management of scenarios is primarily involves managing cases within each scenario, i.e., which cases make up the scenario, and their order. This screen is also used to configure other settings for each scenario, such as how many years to process and how many months of actuals have been loaded.

A scenario can be modified after it is created (as long as it is not locked). This is done directly in the Manage Scenarios screen. The most common changes are:

- Changing the Actuals date to reflect an additional month of G/L information.
- Updating the Start Year to ‘roll over’ the scenario to a new year
- Adding, deleting or reordering cases.
- Changing the Related Scenario(s)

The UIPlanner software supports a number of different types of implementations, from Budget to Financial Model to Customer Revenue, to name just a few. Each of these requires a different scenario structure. For further information on how scenarios and cases are constructed and used, see Scenarios and Cases.

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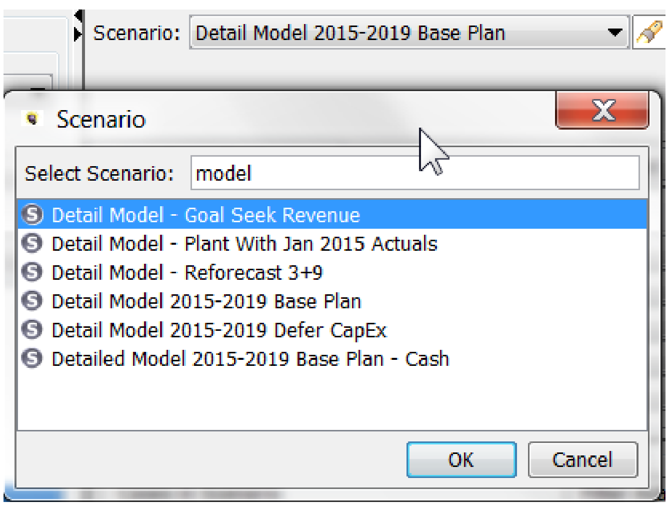
Screen Layout

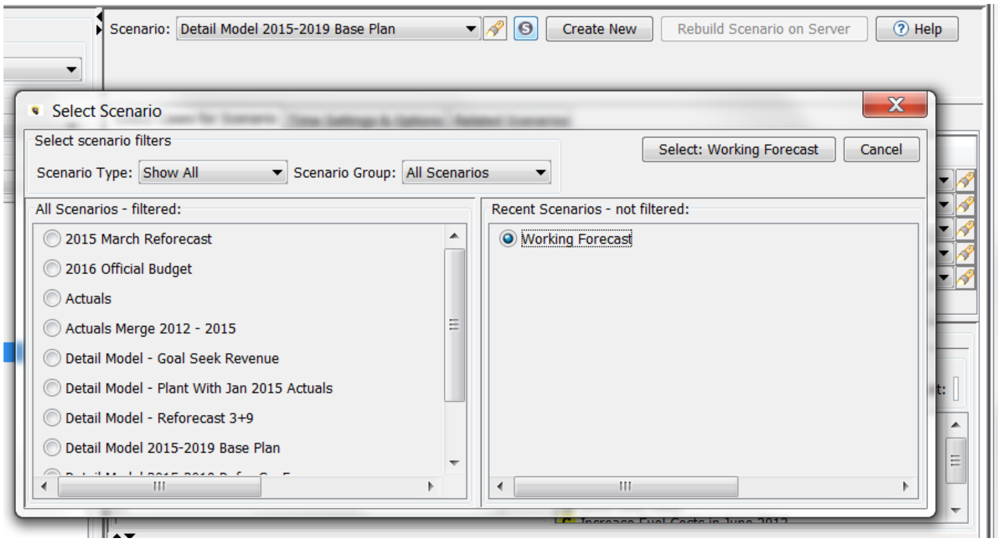
Across the top region of the MANAGE SCENARIOS screen, there is a row of filtering options and action buttons. The remainder of the screen is divided into two major sections.

- The Select Scenario section is used to assist in the selection of the scenario to display in the Scenario Data section
- The Scenario Data section allows the user to configure case structure and settings for the selected scenario.

The top of the screen has several options for selecting the scenario to view.

In addition to the drop-list of scenarios, there is a search widget and a link to the Select Scenario dialog.





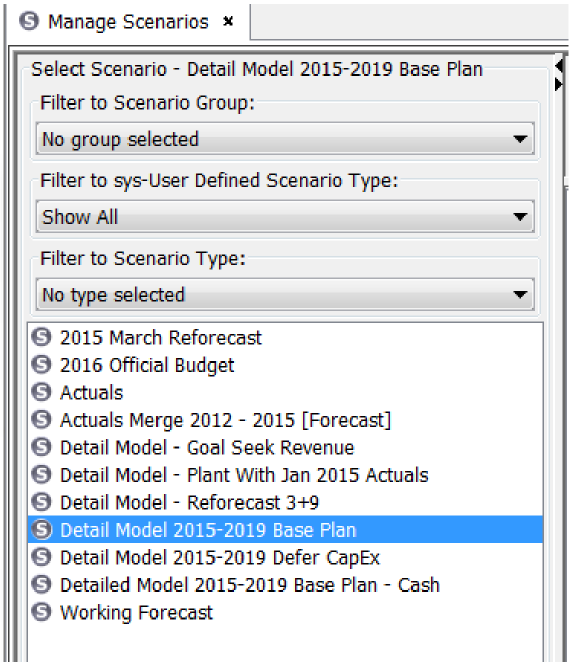
The other action buttons are:

- The Create New button allows the user to create a new scenario modeled on a specific existing scenario. See Create Scenario
- For Middle-Tier implementations, the Rebuild Scenario on Server button ensures that the middle tier is updated to reflect the current scenario settings. This button is only active in a middle-tier implementation. See Rebuild Scenario on Server.
- The Help button launches the Manage Scenarios topic in the online Help system. See How to – Launch Help

Select Scenario

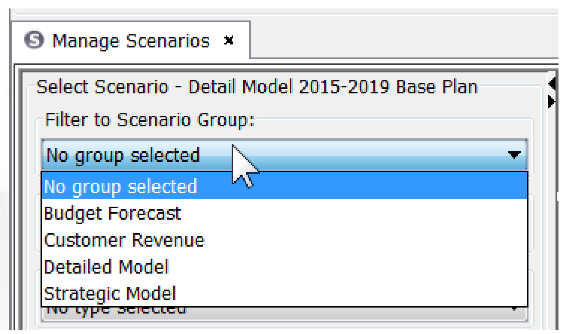
The Select Scenario region presents a list of scenarios from which the user can choose the scenario to view or edit. The list of available scenarios is displayed in this window. The scenarios listed will be determined by any filtering options selected. As each scenario is highlighted, the Scenario Data region displays information about the scenario, such as such as its cases or settings.

To change the name, order or visibility of a scenario, or to delete a scenario, use the Core Object Editor screen.

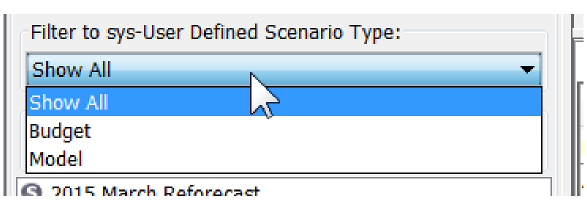


Below are the filtering options.

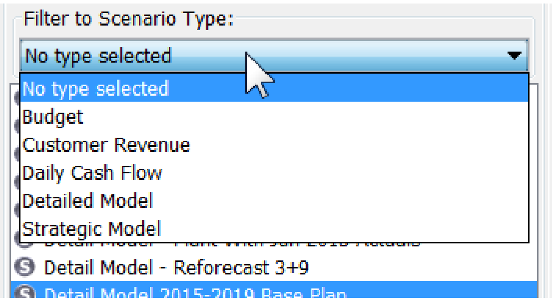
- Filter to Scenario Group: Use drop-down list to filter the scenarios to only those in a specific Scenario Group



- Filter to sys-User Defined Scenario Type: Use drop-down list to filter the scenarios to only those in a specific sys-User Defined Scenario Type

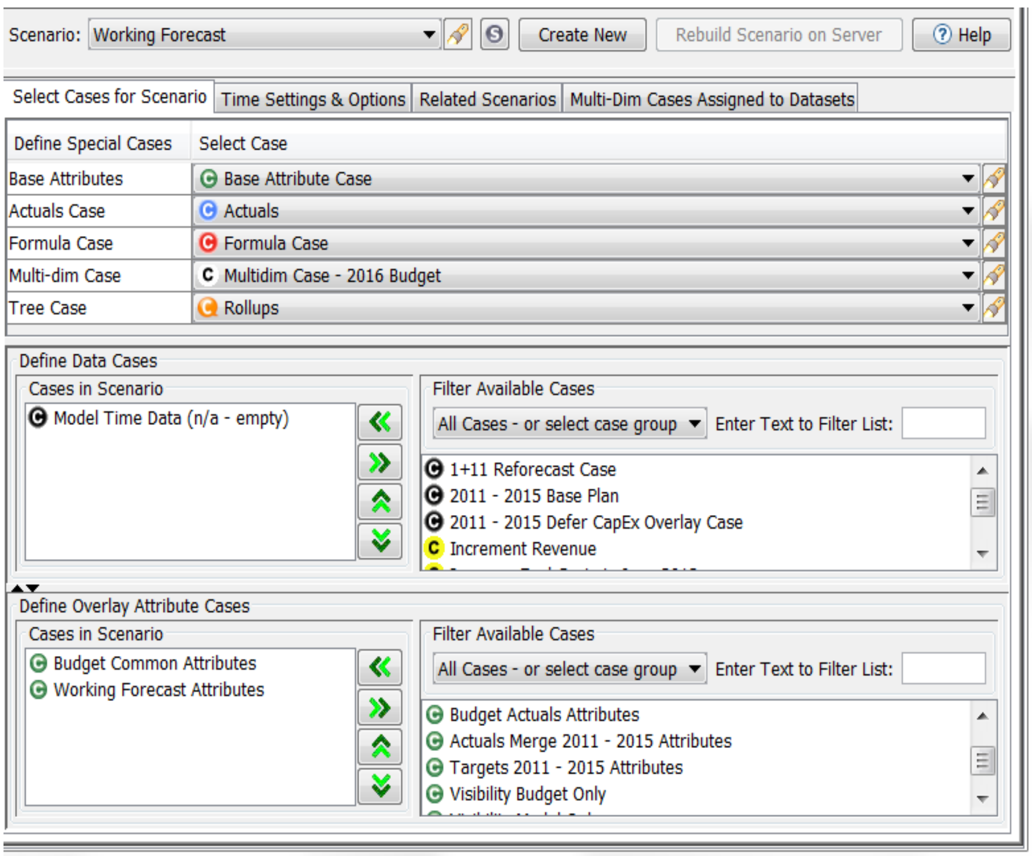


- Filter by Scenario Type: Use this drop-down list to filter the scenarios on the screen to show only a specific scenario type (e.g., Budget, Model, Customer Revenue, etc.)



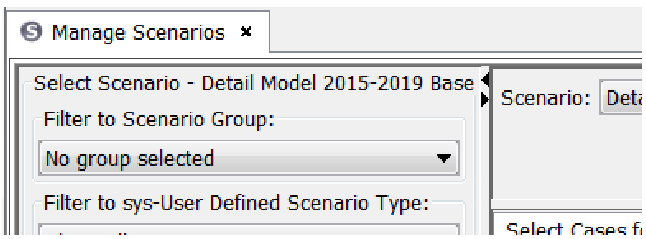
Scenario Data Region

The Scenario Data region shows the structure of the selected scenario. This section contains several tabs for displaying options for and/or configuring the scenario.



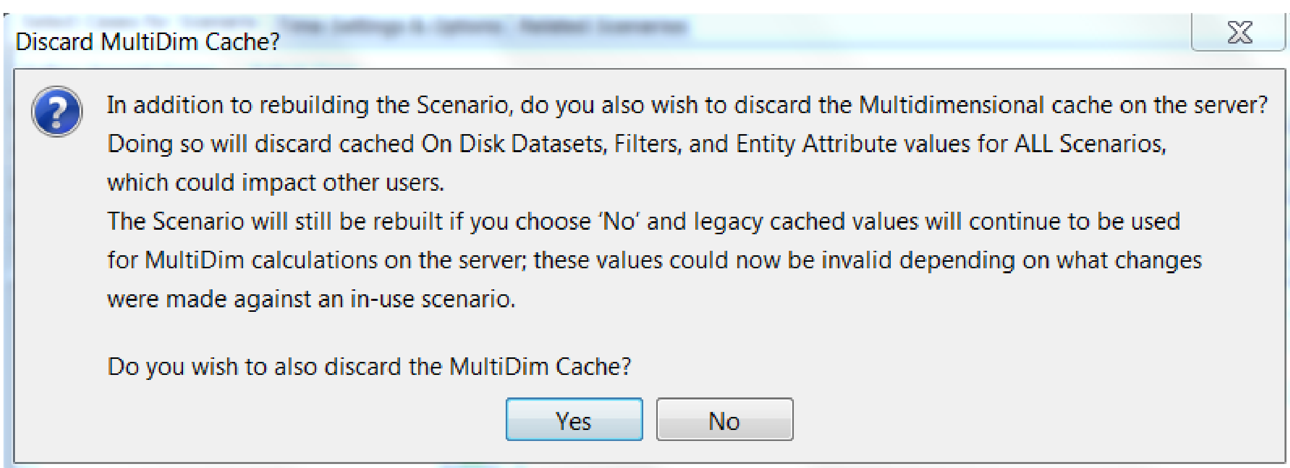
- The Select Cases for Scenario tab is used to configure the case structure of the selected scenario. See Select Cases Tab for more information.
- The Time Settings and options tab is used to configure other settings for the selected scenario. See Time Settings and Options.
- The Related Scenarios tab is used to assign related scenarios for the selected scenario. See Related Scenarios
- The Multidim Cases Assigned to Datasets tab is only activated for scenarios that have additional multidim cases

Note that in the border between the Select Scenario and Scenario Data regions are controls (< and > arrows) that allow the user to minimize the Select Scenario region, to provide more real estate for the Scenario Data Region.

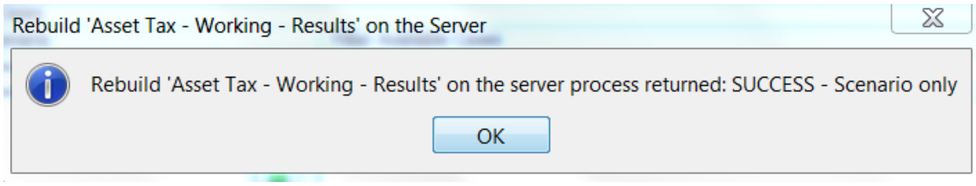


Rebuild Scenario on Server

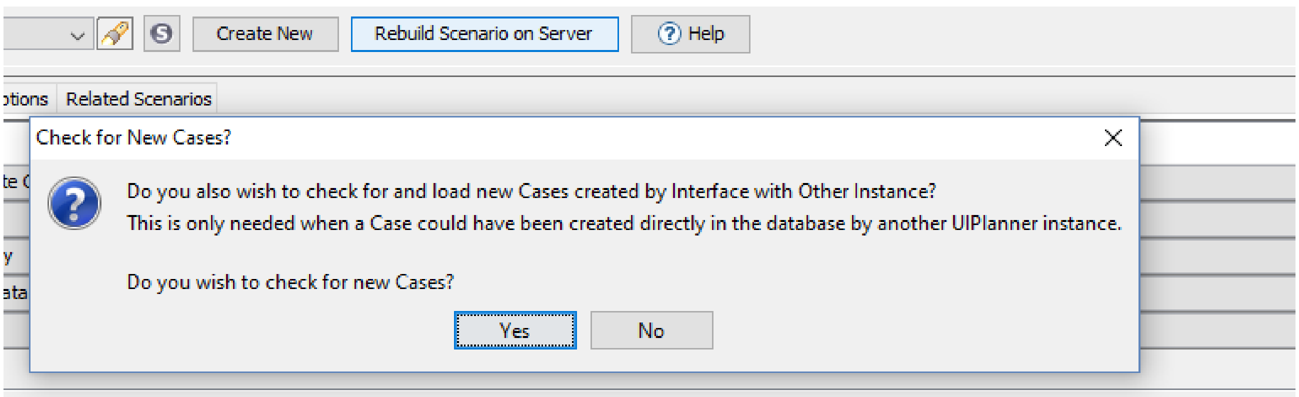
For Middle-Tier implementations, the Rebuild Scenario on Server button ensures that the Middle Tier is updated to reflect the current scenario settings. For example, after creating a new scenario, adding a new case to a scenario, or changing Related Scenarios. When the user selects this button, the popup allows them the choice of whether or not to discard the cache.



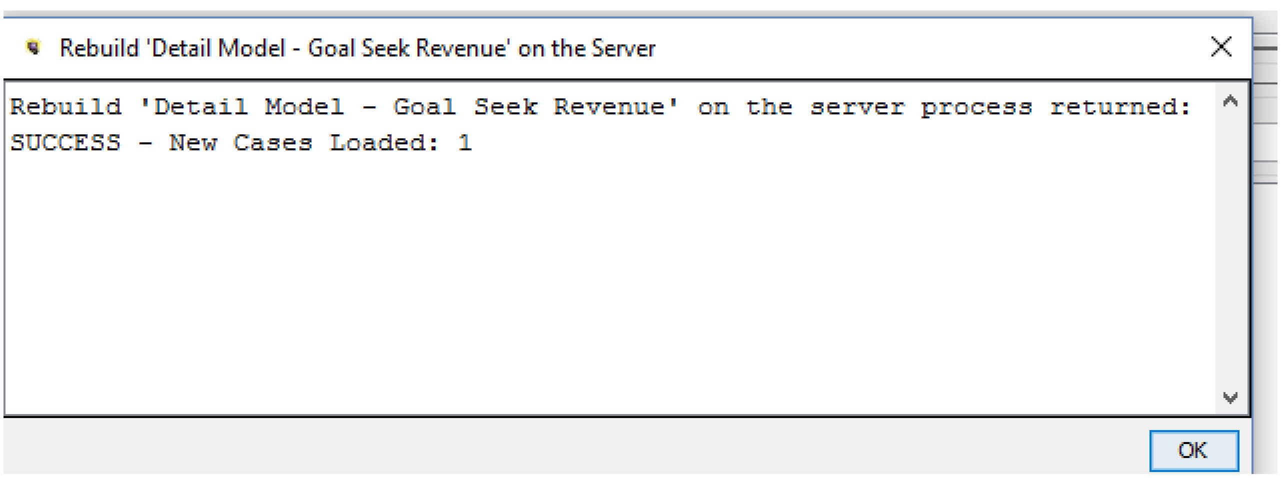
When the process is complete, the system gives a confirmation message.



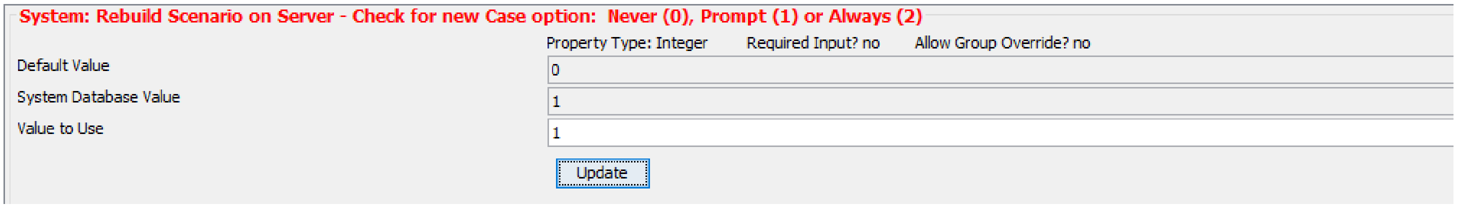
There is an option to check for existence of newly created Cases in the database and load them into the Middle Tier Cache. This option is controlled by a Planner Property that can be set to Never (not check), Prompt (ask user) or Always (always check). This feature is not anticipated to be widely used. It is intended for the specific use case of having an Interface with Other Instance process that creates a new data case for a Middle Tier instance that needs to be picked up without requiring a server restart.



The confirmation dialog indicates the number of added cases.



Below is the Planner Property.



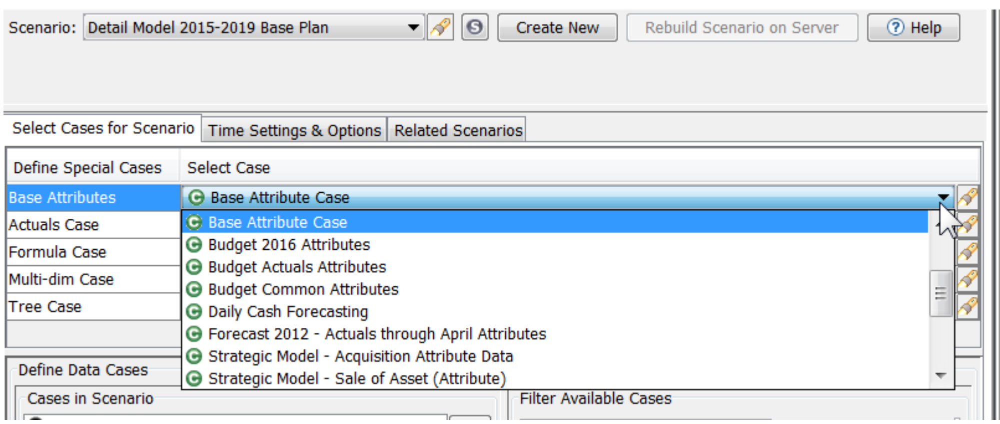
Ordering

The ordering of scenarios and cases in the drop-down lists and in the select windows is governed by the user's selections in the Sort Order dialog. Note that the actual ordering of cases within a scenario is specific to that scenario and is unrelated to the Ordering user preference.

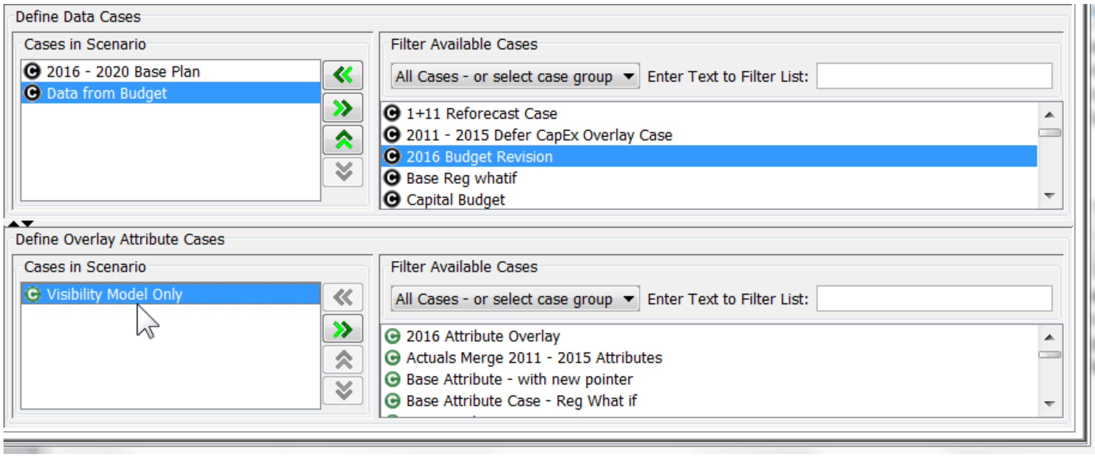
Select Cases for Scenario Tab

The Select Cases for Scenario region allows the user to define the cases that make up the selected scenario. See Scenarios and Cases for further information on scenario configuration.

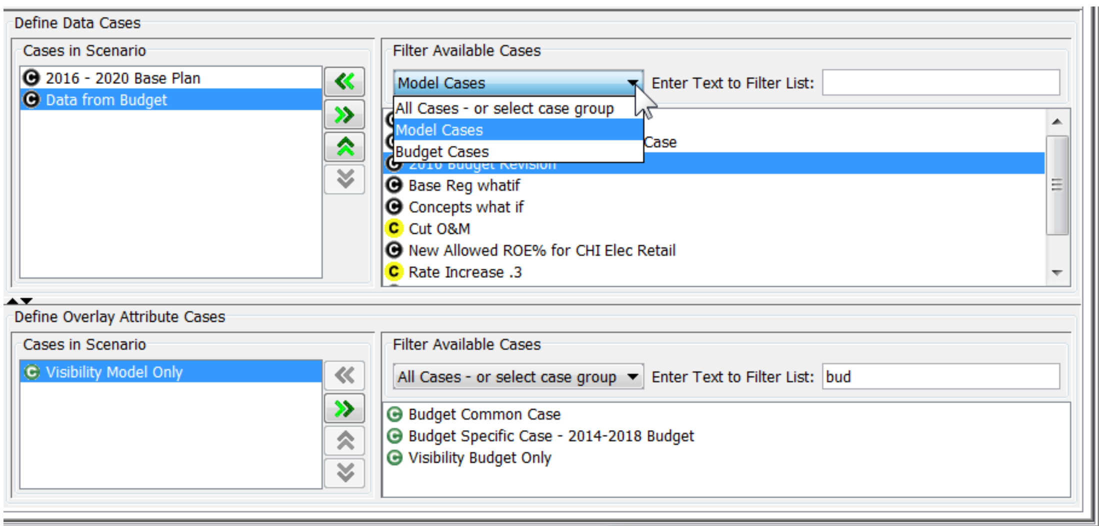
The five Special Cases are selected using dropdown lists. Each scenario can have only one of each of these (as opposed to the Attribute and Overlay cases, where a scenario can have several of each. Note that pure Financial Model scenarios might not use Multi-dim and Tree cases, so these can be left blank or populated with empty cases of these types. These dropdown lists also include search options, to assist in selecting from longer lists.



The other cases (Time Data and Attribute) are selected by bringing cases in from windows listing the available cases of that type. Note that in the droplists and select windows, cases will be ordered according to the user's Sort Order option for cases. Use the << and >> arrows to move cases in and out of the scenario, and use the up and down arrows to order cases within the two categories. Note: For more information on winner logic and on the importance of case order, see Case Order-/Winner Logic in Scenarios and Cases.

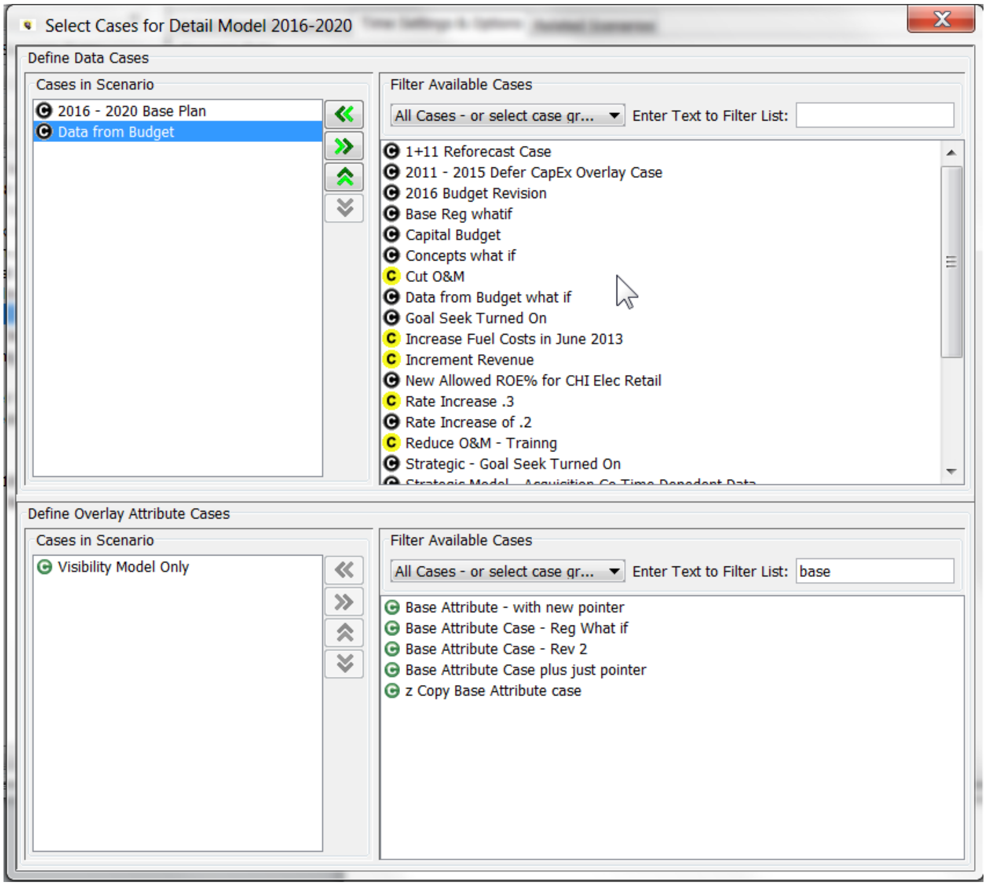


Cases can be filtered by Case Group, or by text search.

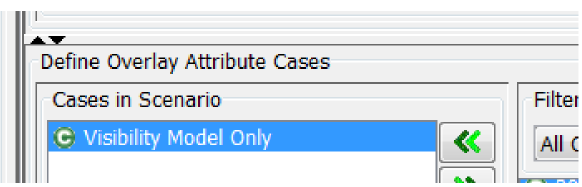


Edit Cases in Popup

The Edit Cases in Popup dialog (launched via a button on the Time Settings and Options Tab) shows the Define Data Cases region in a resizable popup window. This provides more screen real estate for choosing and ordering Data and Attribute cases. This is especially helpful if there are a large number of cases to choose from. Note that in this window all of the same functionality is used as on the full Manage Scenarios screen (e.g., use the << and >> arrows to move cases in or out).

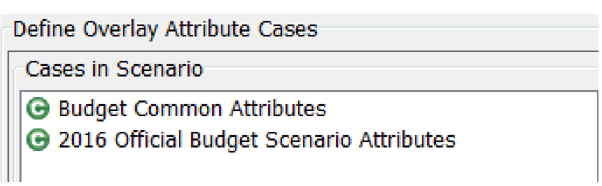


The Data Cases region has controls (< and > arrows) that allow the user to maximize either the Time Data or Overlay Attribute regions.

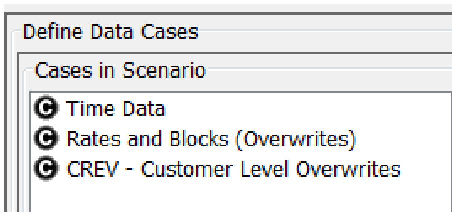


The type of scenario (Financial Model, CREV, Budget, etc.) will provide guidelines as to the number and type of Data and Overlay Attribute cases. For example:

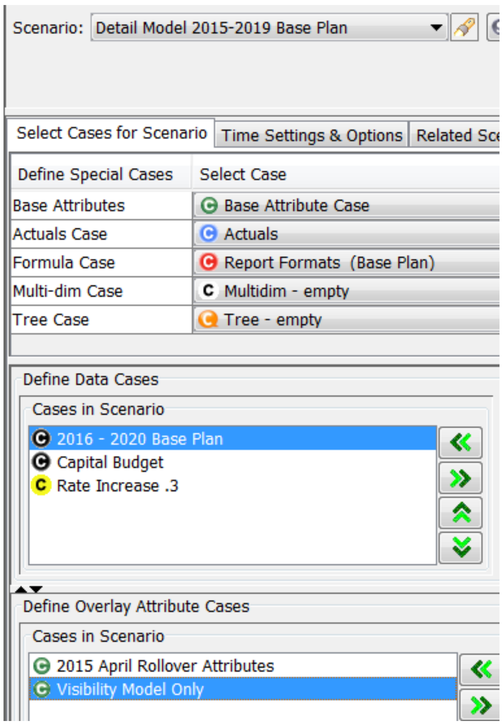
Multidim (Budget) scenarios typically have two additional overlay attribute cases:



CREV scenarios typically have at least two overlay time data cases:



Model scenarios can have any number of time data and attribute cases. Pure financial model scenarios typically do not have multidim or tree cases (or use empty cases of these type):



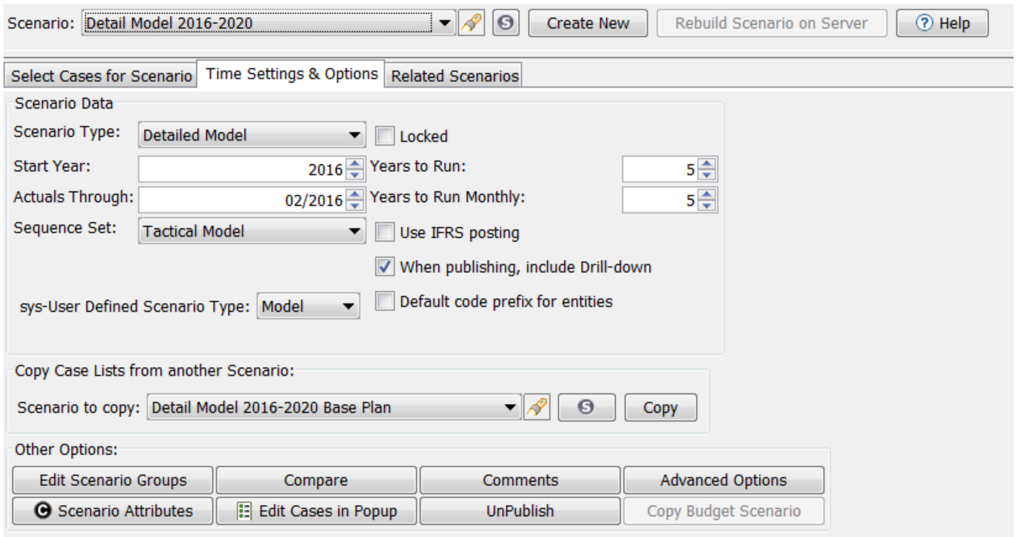
For more information on the different types of scenarios, see Scenarios and Cases.

Time Settings and Options Tab

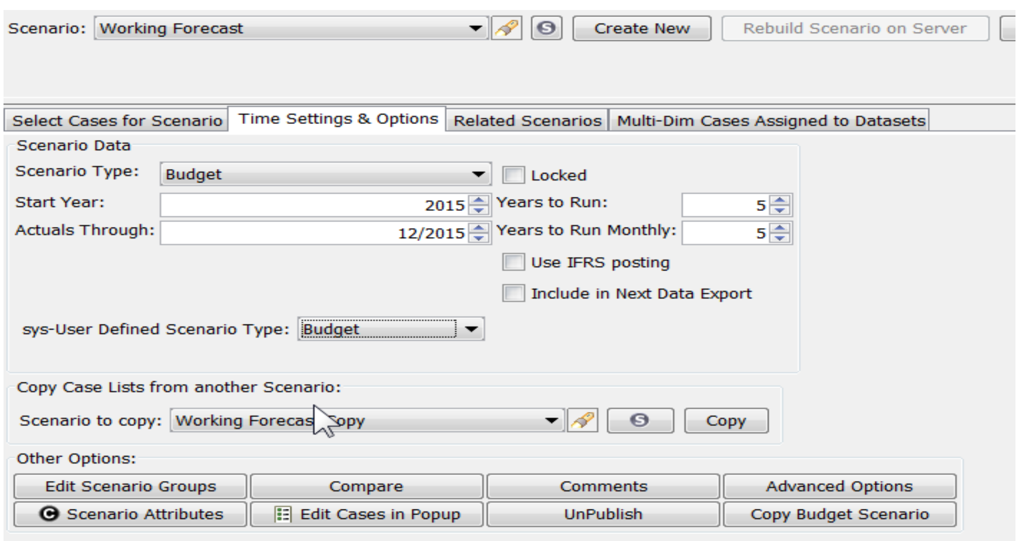
The Time Settings and Options tab contains additional scenario settings and switches. These include the scenario type, time settings (start year, actuals through date, etc.), and the Locked switch. It also contains a number of buttons for various scenario-related functions, such as configuring Scenario Groups, comparing scenario structures, etc.

Time Settings & Options Tab

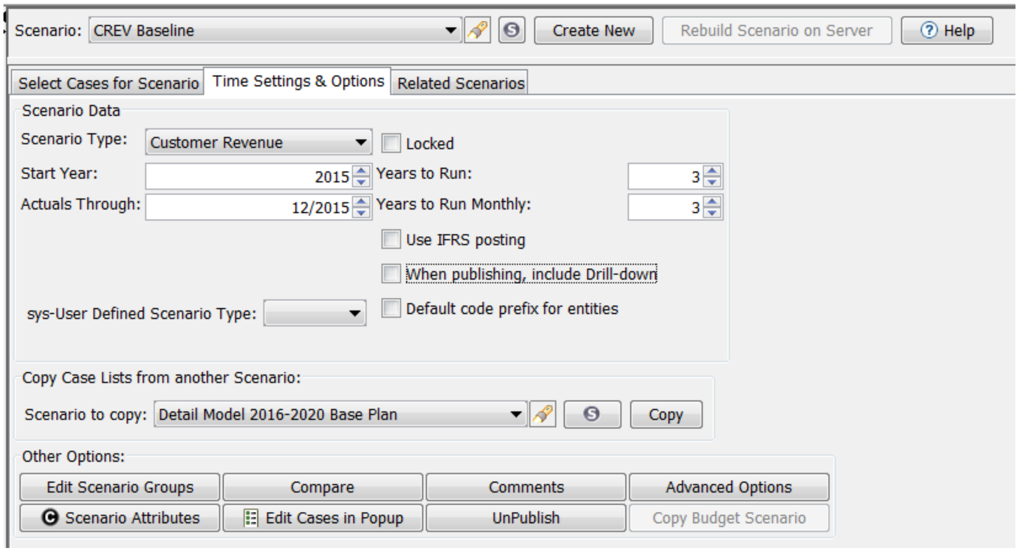
The options on the tab change slightly based on the Scenario Type. Below is the layout for a Detail Model scenario.



Below is the layout for a Budget scenario. Note that there is no Default Sequence set, and that Include in Next Data Export is an option and Include Drilldown when Publishing is not. ALso note the additional tab for Multidim Cases Assigned to data-sets.



Below is the layout for a CREV scenario. Note that the default Sequence set is not visible, and that the Include Drilldown when Publishing is an option and Include in Next Data Export is not.



Scenario Settings

The scenario settings are:

- **Scenario Type** – Use this drop-down list to select the type for the highlighted scenario. Note that the type selected may determine the availability of other options on the Manage Scenarios screen
- **Locked** – Lock a scenario so its settings and case structure cannot be changed. See Scenario Locks below for more information.
- **Start Year** – Set the calendar (or fiscal) year that UIPlanner will begin processing calculations.
- **Actuals Through** – This should be set to the date through which actuals have been loaded into the system. This date controls UIPlanner processing in a number of areas, including the following
  - Detail Model Income Statements and Balance Sheets will show the Planning Ledger amounts for the actuals months
  - Pivot reports will indicate actuals periods
  - Various Multidimensional Task functions reference the Actuals Through date
  - The calculation editor function Last Actuals date references the Actuals Through date.
- **Years to Run** – Total number of years for the scenario to run. Years in excess of the monthly setting below will be run annually

- **Years to Run Monthly** – Number of years that model reports will be run by month
- **Sequence Set** (Model/Strategic Model only) – Use this drop-down list to select which Sequence Set is the default for this scenario. This is by the Task Manager (Run Model function, and by the Strategic Model). Note that users can always select different Sequence Sets to run – this is just the designated default.
- **Use IFRS Posting** - Check this box to enable the IFRS option on the Posting screen. It will also enable any postings defined as IFRS to override the original posting.
- **When Publishing, Include Drilldown** (Model and CREV only) - if checked, when this scenario is published for Scenario Compare purposes, it will include drilldown information. If a scenario is only being published for Transter purposes, this can be unchecked.
- **Include in Next Data Export** (Budget only) - When this box is checked, that scenario's data will be included when the next Budget export is performed
- **Sys-User Defined Scenario Type** – If these have been set up, a scenario can be associated to a sys-User Defined Scenario Type.
- **Default Code Prefix for Entities** – When this box is checked, Default Codes will be shown for all entities. This overrides the User Preference setting, and forces the display of Entity Codes.

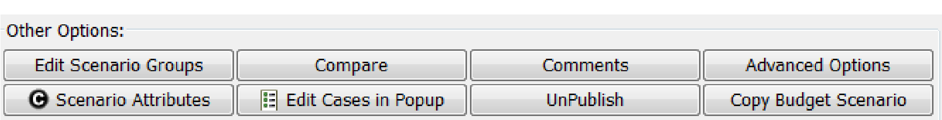
Copy Case Lists

This button and the accompanying drop-down list allow a user to reset the case list and settings in the currently selected scenario to match those of the scenario selected in the drop-down list. This is a quick way of synchronizing two scenarios.

Note – in using this option, be sure to be aware of the scenario being reset. This function operates on the currently selected scenario.

Action Buttons

Below are the eight action buttons.

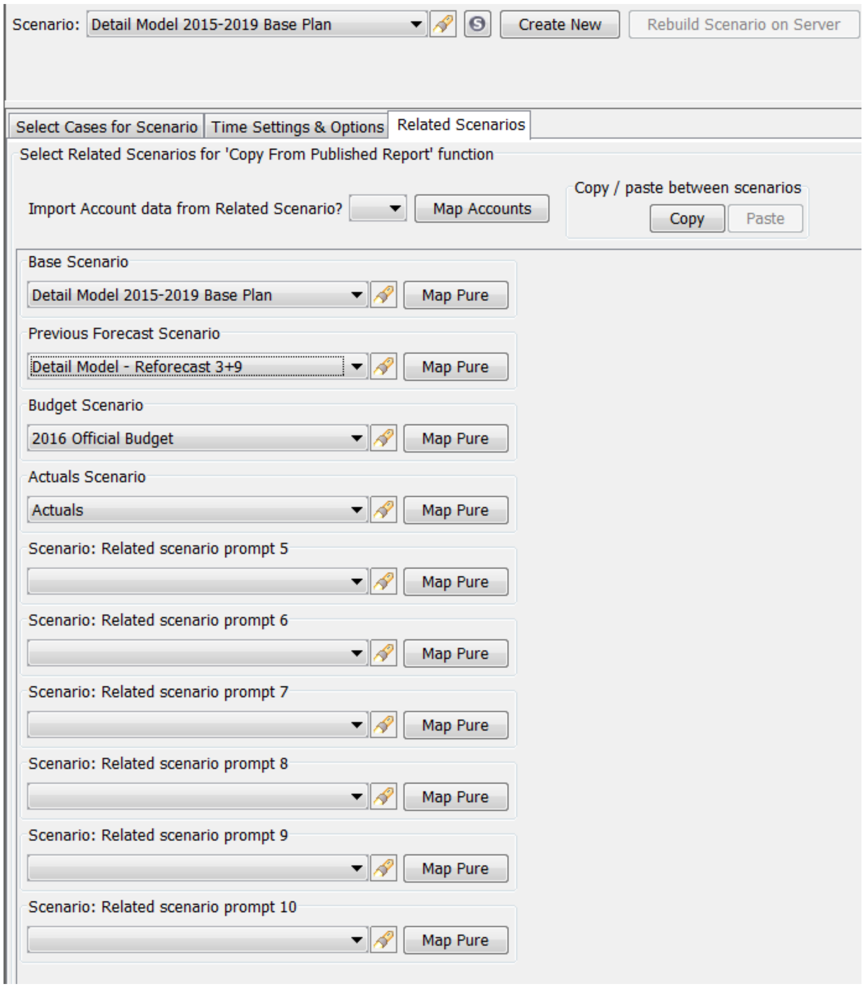


- **Edit Scenario Groups** – Click the button to create or edit a scenario group to be used in filtering scenarios. See Scenario Groups for more information.
- **Compare** – Click this button to open a dialog that displays the attributes and cases of two scenarios side-by-side. This can quickly identify differences between the scenarios. See Compare Scenarios for more information.
- **Comments** – Click this button to add, edit or view User input comments for the selected scenario. See Scenario Comments for more information.
- **Advanced Options** – Click this button to opens the Advanced Options dialog, which is used to define Transfer Scenarios and Run Options. See Advanced Options.
- **Scenario Attributes** – Opens the Scenario Attributes dialog.
- **Edit Cases in Popup** – Opens the Define Cases region in a popup window. See Edit Cases in a Popup for more information.
- **UnPublish** – Click this button to delete previously published scenarios. See Unpublish Scenarios.
- **Copy Budget Scenario** (available for Budget Scenarios only) - See Copy Budget Scenario.

Related Scenarios Tab

This tab is used to assign the Related Scenarios settings for a given scenario. Related Scenarios are a construct that facilitates data transfer and reporting across scenarios. Once a Related Scenario prompt is set up, functions and pivot reporting setups can refer to that prompt. Then by just changing the scenario in this screen, all of those functions/reporting setups will point to the new scenario. See Related Scenarios in Scenarios and Cases for more information.

To configure or change the related scenarios for a given scenario, first select the desired scenario from the dropdown list at the top of the tab (note the search icon). Then use the dropdown boxes to assign the appropriate scenario for each Related Scenario prompt. There are ten available Related Scenarios.



The labels in the Related Scenario screen can be renamed, to identify the function of each Related Scenario. This is a valuable user aid, as it can clearly identify which scenario is used for what. This is done by changing the name of the associated Q2 (Scenario: Related scenario prompt – 0-10) on the Core Object Editor. In the above example, Prompts 0 through 3 have been renamed as needed.

Note - Related scenarios are attached to the scenario (and stored in the zero case) rather than defined in an attribute case, since attribute cases may be shared across scenarios.

There are several other configuration settings on the Related Scenarios Tab. These are relevant only for Financial Model scenarios.

Map Pure

Within the Related Scenarios construct is the ability to take Planning Entity results from one related scenario and map them to a Pure Input sub in the current scenario. The Map Pure button facilitates this by allowing the user to define this mapping relationship.

Import Account Data from Related Scenario

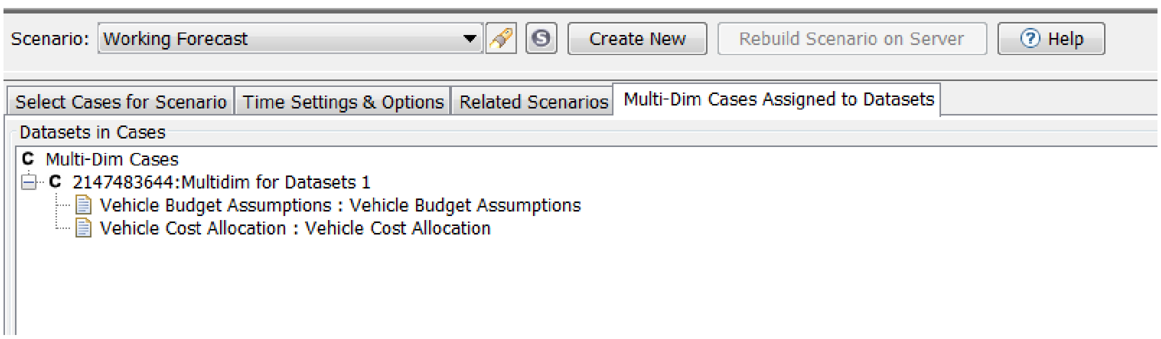
The Import Account data from Related Scenario button allows the user to flag a related scenario to copy account data into the selected scenario. This requires mapping accounts from one to the other – see the additional button for this.

Copy/Paste Between Scenarios

This button allows the user to select account data from one scenario and paste it into another scenario

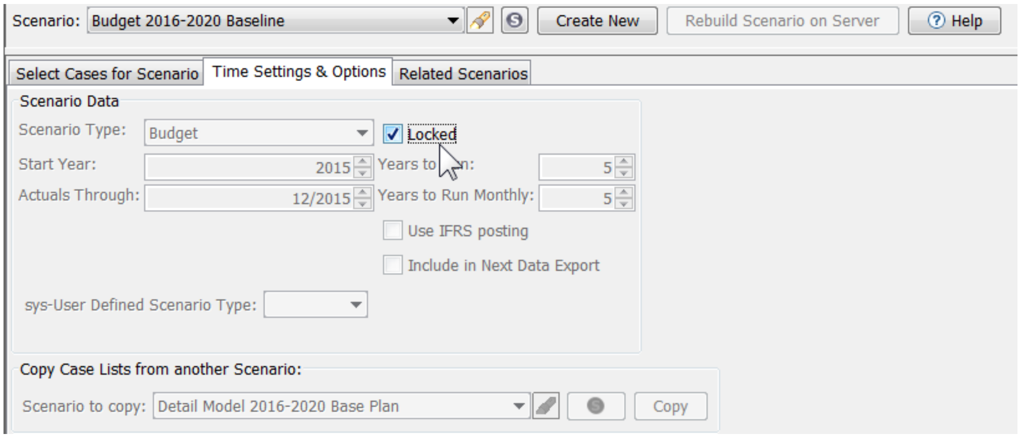
Multidim Cases Assigned to Datasets

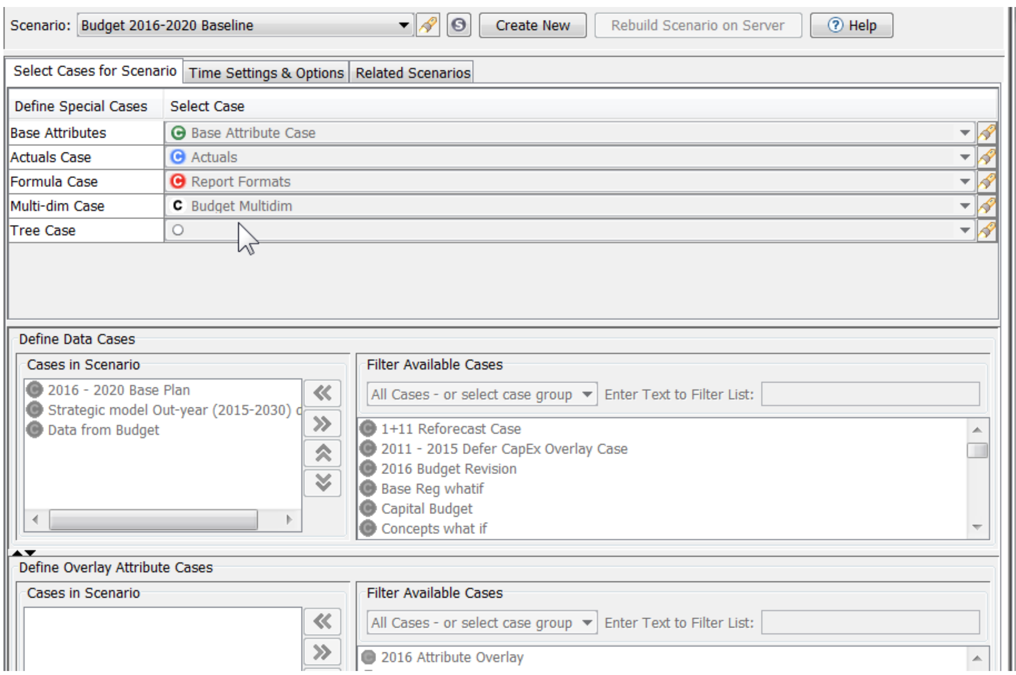
Implementations using multidim cases can optionally choose to have certain datasets populated in additional multidim cases. This is configured on the Administer Multidim calculations screen. If this has been done, these cases and the datasets assigned to them will be displayed on this tab.



Lock Scenario

Use the Locked checkbox to lock the selected scenario from any changes in cases, ordering or settings. Note, however, that this does NOT lock the cases themselves (because a case may be used in other scenarios). If a scenario is locked, the case lists and all settings will be disabled.





Notes:

- Locking a scenario does not prevent cases from being deleted. However, if the cases themselves are locked, that prevents deletion.
- Locking a scenario does not prevent changes from being made to its constituent cases. This is because cases can be shared across scenarios.

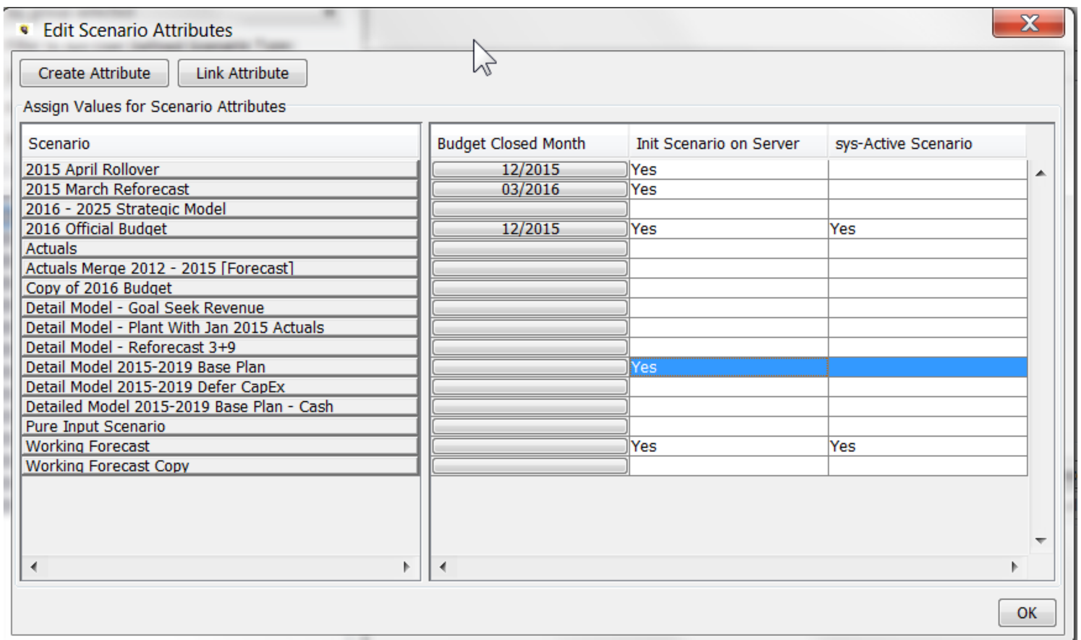
See Scenarios and Cases for information on Scenario and Case Management.

Scenario Attributes

The Scenario Attributes dialog lists all attributes for all scenarios. It provides a single point for managing all scenario attributes. Scenario Attributes allow System Administrators to control processes across multiple scenarios, such as loading scenarios upon server start-up.

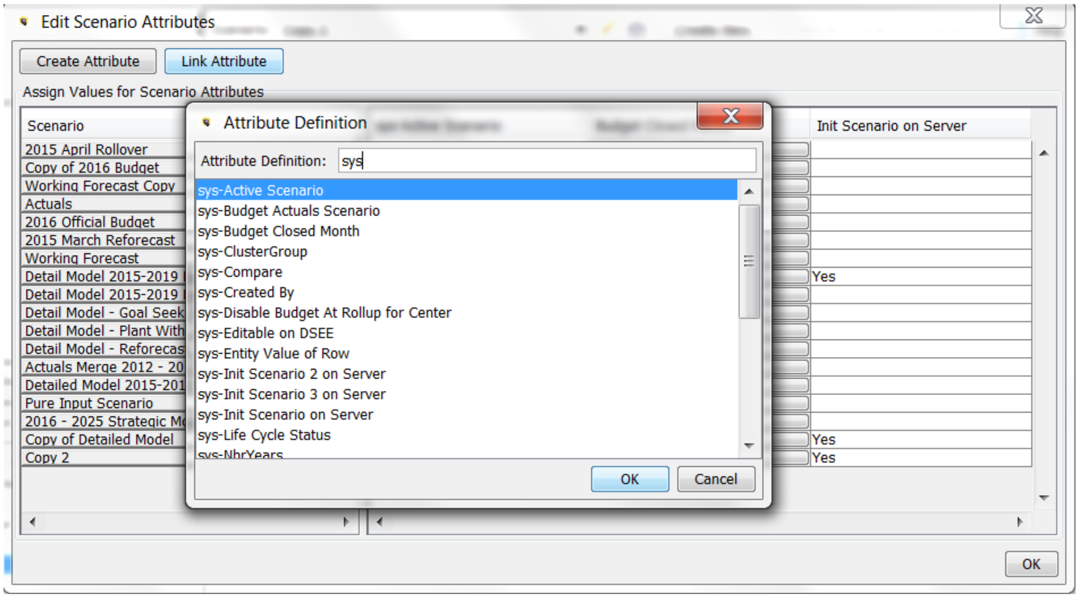
Among the commonly used Scenario Attributes are:

- Sys-Active Scenario – this tags the scenario so that selected multi-dim rule sets are run on server startup (middle tier only)
- Sys-Init Scenario on Server - to indicate server-side scenario initialization upon server startup (middle tier only)
- Budget Closed Month – set the close month for budget data

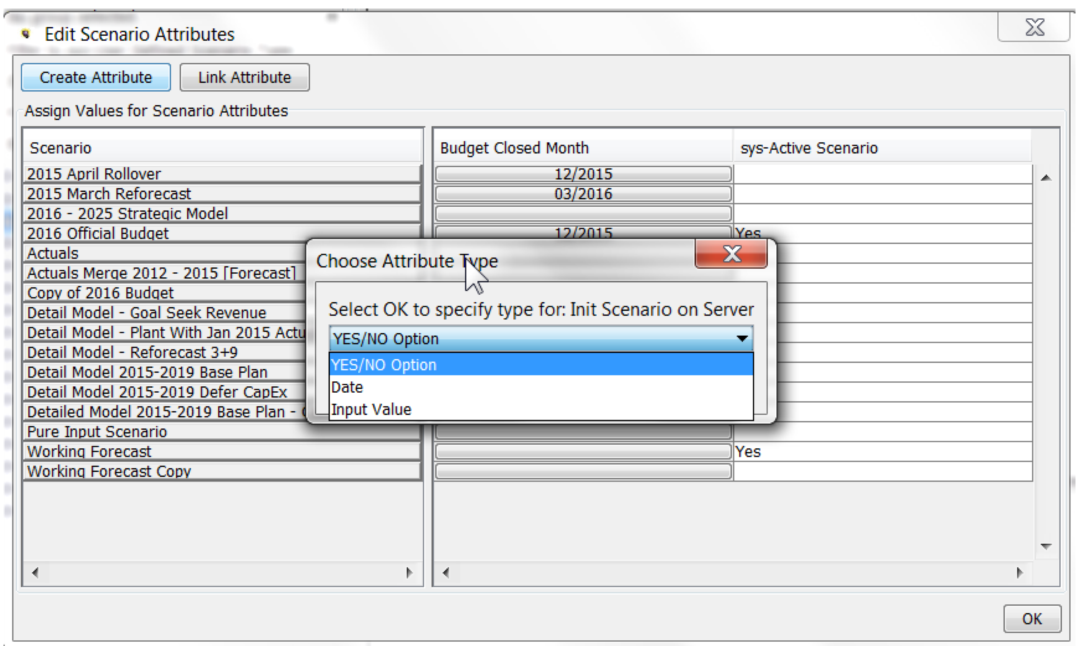


Scenario attributes can be selected from certain sys-defined attributes, or they can be user-defined.

To add a sys-defined Scenario Attribute, select the Link Attribute button and select the attribute definition from the list.



To create a custom defined Scenario Attribute, select the Add Attribute button and provide the name for the new attribute. After selecting Add Object, choose the Attribute type from the dialog. There are three options.



Create a Scenario

When a new scenario is created from the Manage Scenarios screen, it is done by first making a clone of an existing scenario and then modifying the new copy. The reason is that most times when a user wants to create a scenario, there is usually existing one that should be used as a starting point.

A good example is if the user wants to upload prior month G/L actuals and confirm the monthly rollover works appropriately. They would first load the actuals, and then make a copy of the current working forecast. Then in this new scenario, they could move the Actuals Date forward and run to confirm results, or do a scenario compare against the working forecast. Note that by making a copy, all cases are shared, and the only difference is the actuals date. The Working Forecast is not affected.

Note that scenarios can also be created using the New Scenario Wizard or the Scenario Wizard Scheme process. These processes provide more flexibility in the create process, such as copying or merging cases.

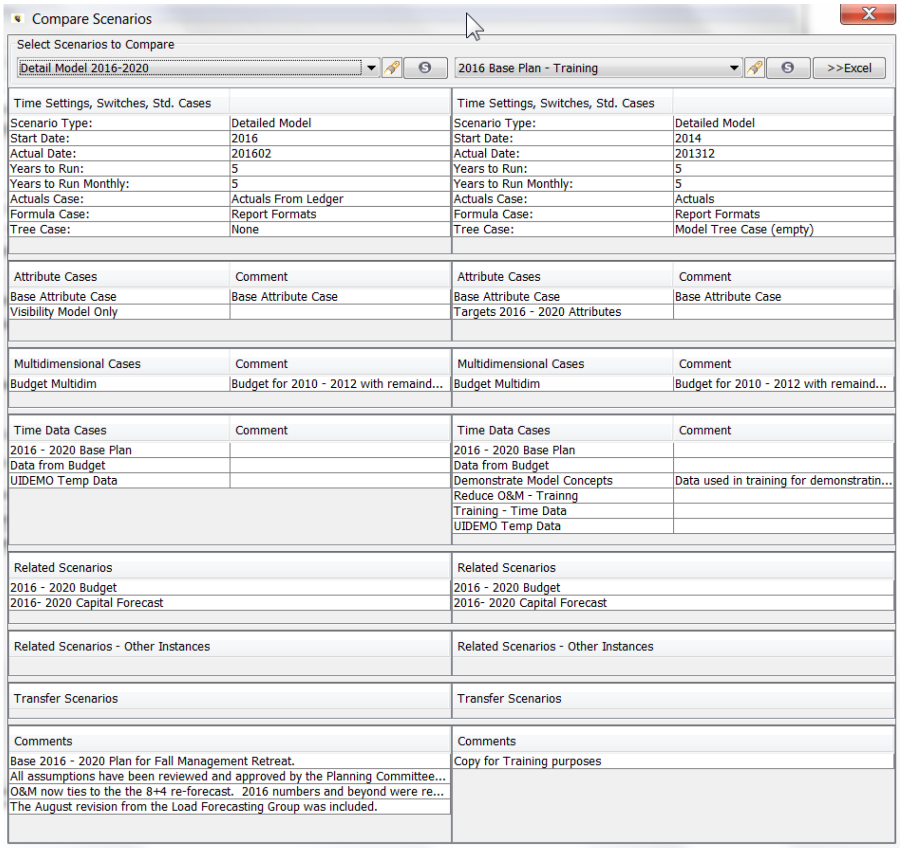
To create a scenario from the Manage Scenario screen

- Select the scenario to use as the basis for the new scenario
- Click the Create New button to bring up the Add Object Dialog. Name the scenario (and assign an Owner Group if desired)
- This will add the new scenario to the Scenario list. It will initially be an exact copy of the base scenario
- Add or delete cases or modify the scenario settings as needed.

Note – the Scenario Copy function also copies the Related Scenarios and Scenario Attributes from the base scenario.

Compare Scenarios

To view the case structure and settings of two scenarios side by side, click the Compare button (Time Settings and Options tab). This will bring up the following dialog. User the drop-down lists to select the scenarios to compare. Resize the sections as needed to view the components and settings.

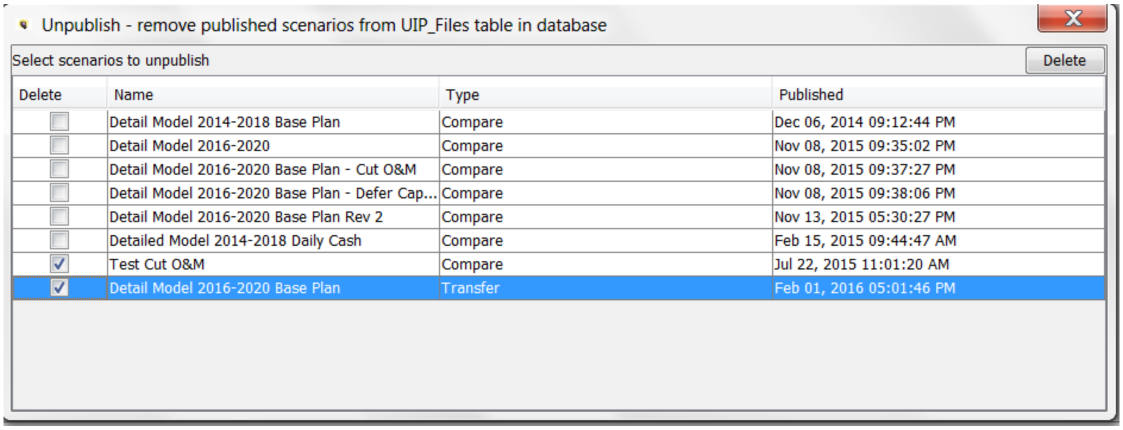


Note that changes cannot be made from this dialog, but it is a quick way to see any differences between scenarios.

Unpublish Scenarios

If model scenarios have been published to the database, these scenarios can be deleted from the Manage Scenarios screen. Scenarios that have been published to a user's local C;\ drive or to a network drive must be deleted manually.

To Unpublish a scenario, select the UnPublish button on the Time Settings and Options tab. This will bring up a dialog listing all published scenarios. Use the checkboxes to select the scenarios to delete, and hit the Delete button.

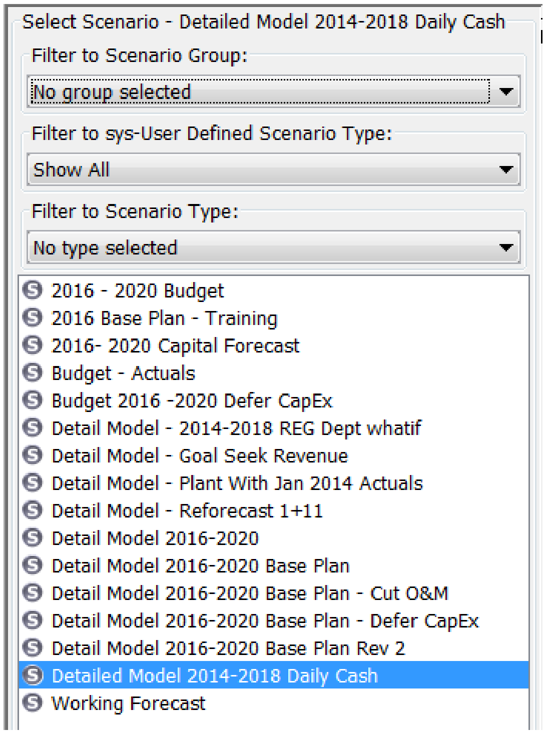


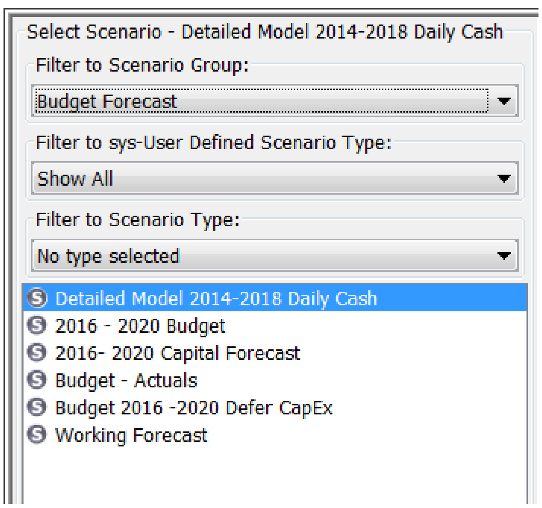
Note that deleting a scenario does not delete its published results. If a scenario has been deleted, it is good practice to come to this screen and delete its published results.

Scenario Groups

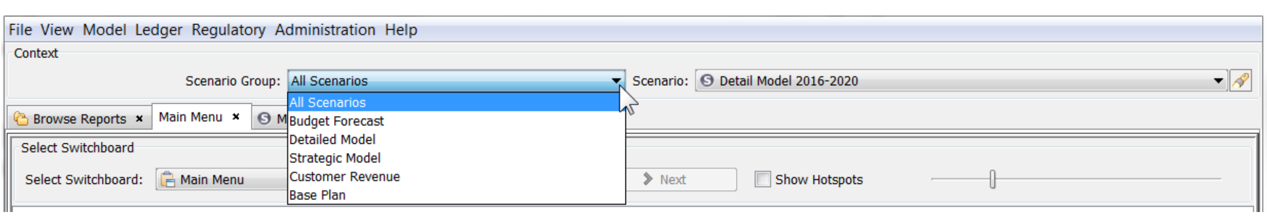
Scenario Groups are a construct that allows users to set up custom categorizations of scenarios. Scenarios can be listed in one or more Scenario Groups. Once set up and populated, these allow users to limit the size of the list of scenarios by selecting a Scenario Group.

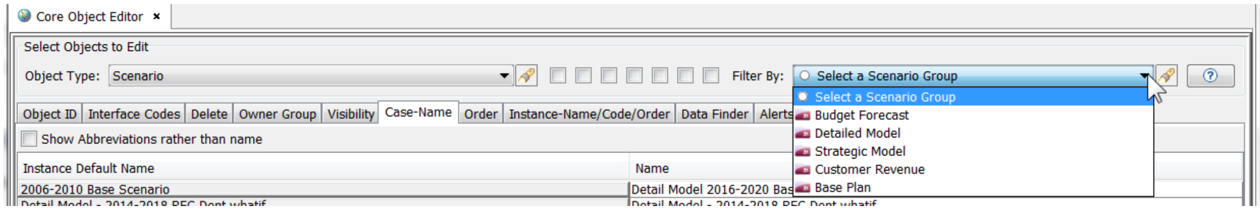
Below is the Manage Scenarios screen with and without a Scenario Group selected. Note how the Scenario Group simplifies the list. Note also that the current scenario always appears in the list, even if it is not a member of the selected Scenario Group.





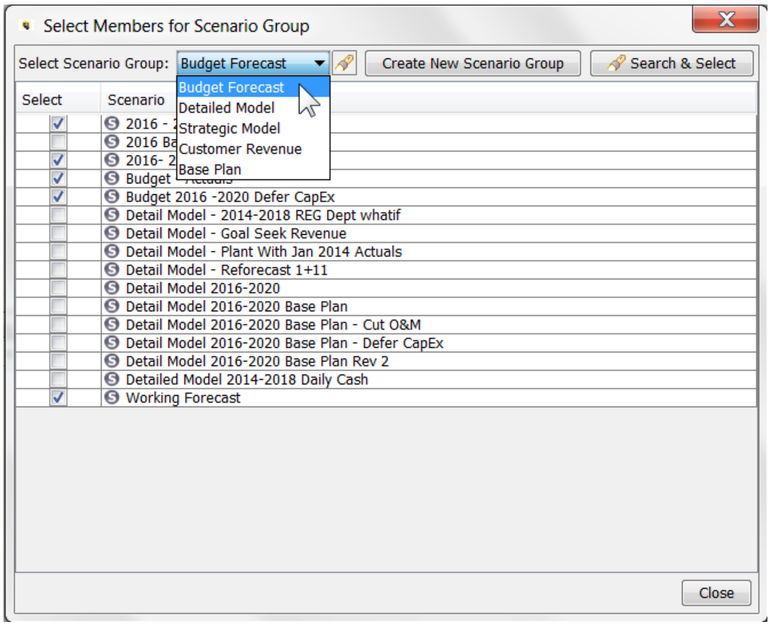
Scenario Groups are available as a filtering device in many areas throughout UIPlanner. See the examples below from the Scenario Info Panel and the Core Object Editor.





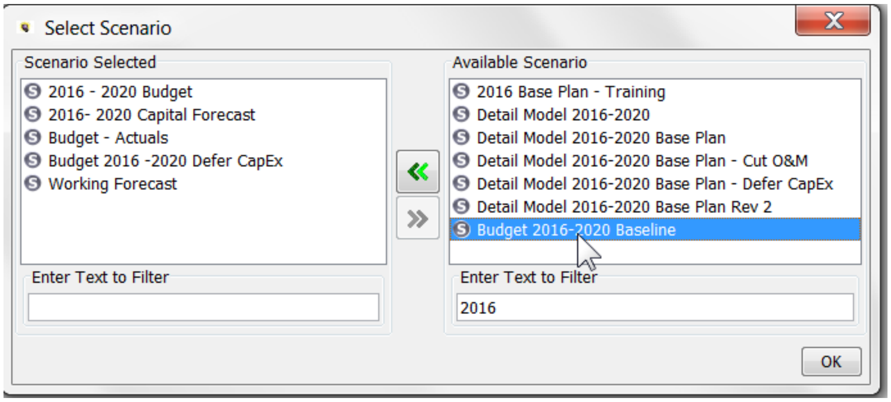
Scenario Groups Screen

Below is the screen for defining Scenario Groups and assigning (removing) Scenarios from specific Scenario Groups.



To add or remove scenarios from a Scenario Group, select the Scenario Group from the drop-down list.

To add a scenario to the group, check the checkbox; to remove it, uncheck the box. Alternatively, select the Search and Select box. This will bring up a dialog with the current group members on the left, and remaining available scenarios on the right. User the << and >> arrows to move cases in and out of the Group. Hit OK to close the dialog. The checkboxes will reflect the scenario selections from the dialog.



Note that once a case group is set up (such as Active Cases), it will need to be monitored on an ongoing basis to ensure that it contains all relevant cases, and that cases no longer relevant are removed.

Create Scenario Group

The create Scenario Group button brings up the Add Object Dialog. Type in the desired name and hit the Add button. This will add the new Scenario Group to the list.

Deleting a Scenario Group

Use the Core Object Editor to delete or hide a Scenario Group.

Advanced Options

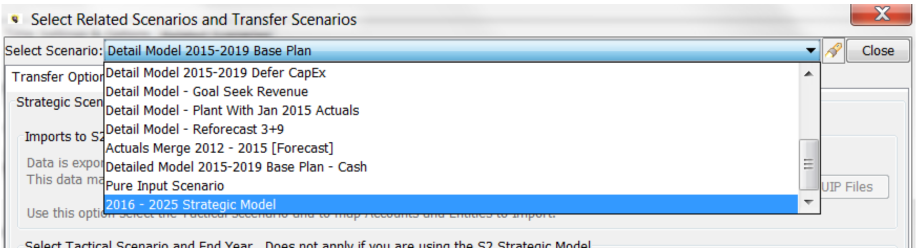
The Advanced Options button on the Manage Scenarios screen is used to manage various settings, primarily related to transferring data between scenarios using UIPlanner's Transfer capability:

- Within the Financial Model
- From the Budget to the Financial Model
- From the Financial Model to the Strategic Model

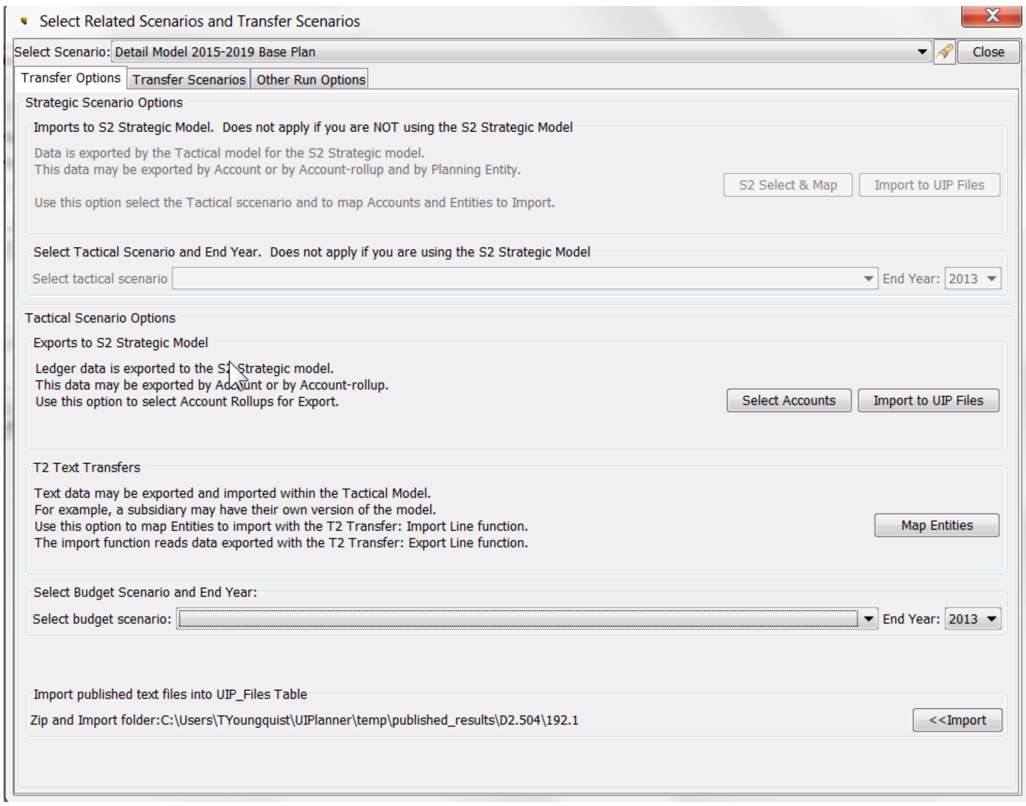
The Advanced Options dialog has three sets of tabs.

- Transfer Options
- Transfer Scenarios
- Other Run Options

Select the scenario to manage using the dropdown box at the top of the tab. Note that all visible scenarios are available from this tab, not just the active scenario.



Transfer Options



The Transfer Options tab has two regions, one governing the Strategic Model and the other related to the Financial (Tactical) Model.

Strategic Scenario Options

The settings in this region are related to transferring data from the Financial Model to the Strategic Model. This region is only enabled in Strategic Model scenarios.

- S2 Select and Map – This button launches a dialog to map accounts and planning entities from the Financial Model to Strategic model.
- Import to UIP_Files - Published S2 Transfers can be imported into the UIP_Files table. This simplifies the S2 Transfer process, as it allows the System Administrator to control when to import transfer data, and model users no longer need access to a network folder holding the transfer files. Note that the Planner Property needs to be set to allow this

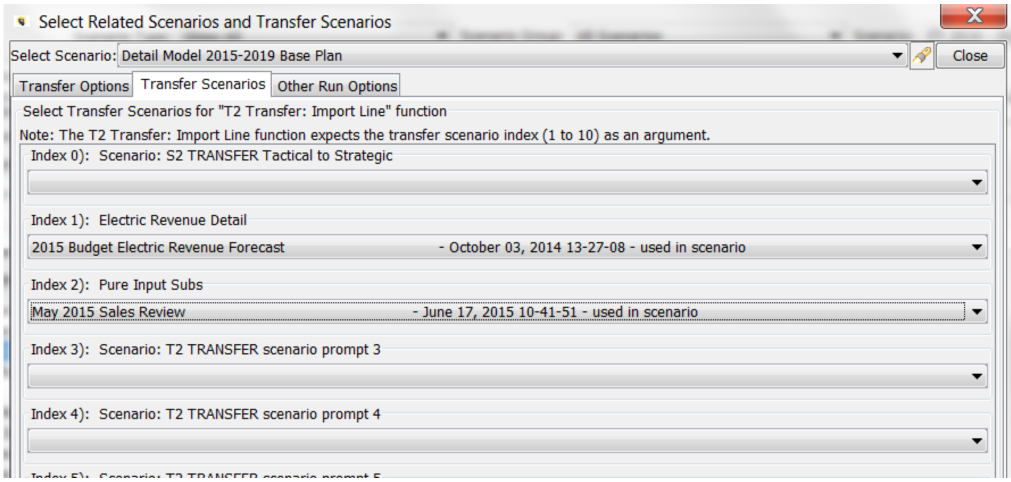
Tactical Scenario Options

The settings in this region are related to transferring data between Financial Model scenarios or from Financial Model to the Strategic Model. This region is only enabled in Financial Model scenarios.

- T2 Text Transfers – Map Entities. This option opens a dialog for mapping entities for transfers between Financial Model scenarios.
- Import Published Text Files into UIP_Files Table – Published T2 Transfers can be imported into the UIP_Files table. This simplifies the T2 Transfer process, as it allows the System Administrator to control when to import transfer data, and model users no longer need access to a network folder holding the transfer files. Note that the Planner Property needs to be set to allow this.
- Select Budget Scenario and Year – If data is transferred from a Budget Scenario to the Financial Model using T2 Transfers, use this dropdown list to select the scenario, and set the Budget Year.
- Exports to S2 Strategic Model – Ledger data can be exported by Account or Account Rollup. Use this option to map Account Rollups for transfer to the Strategic Model.

Transfer Scenarios

This tab is used set Transfer Scenarios, for both S2 Transfers and T2 Transfers

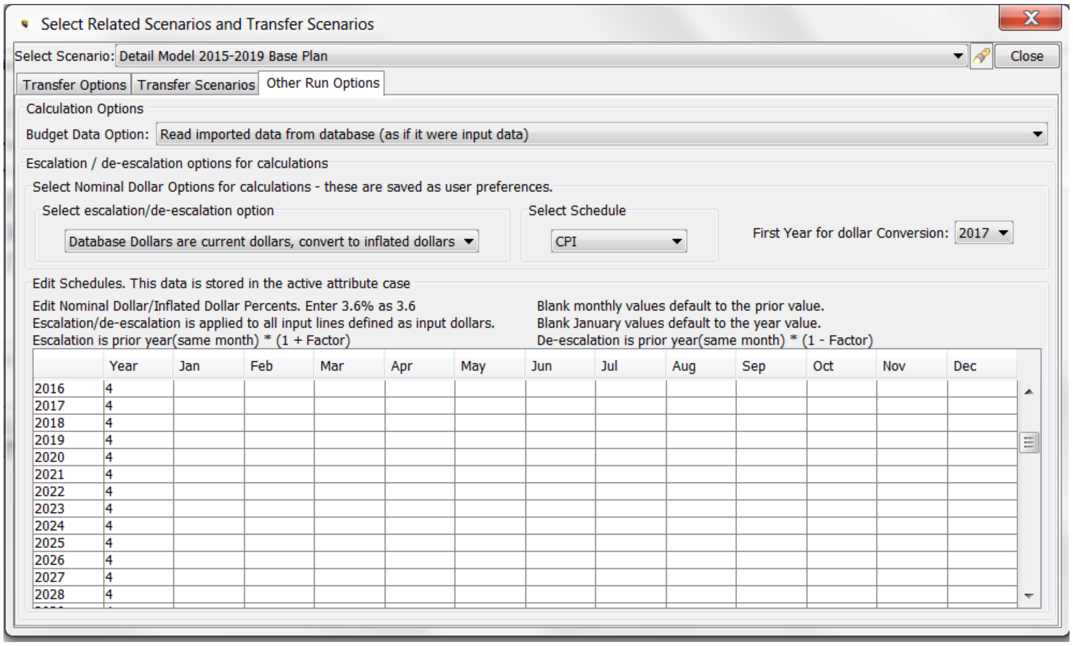


The labels for the transfer scenarios are assigned using the Core Object Editor (Q2 – S2/T2 Transfer Scenario: Comment Description x)

Other Run Options

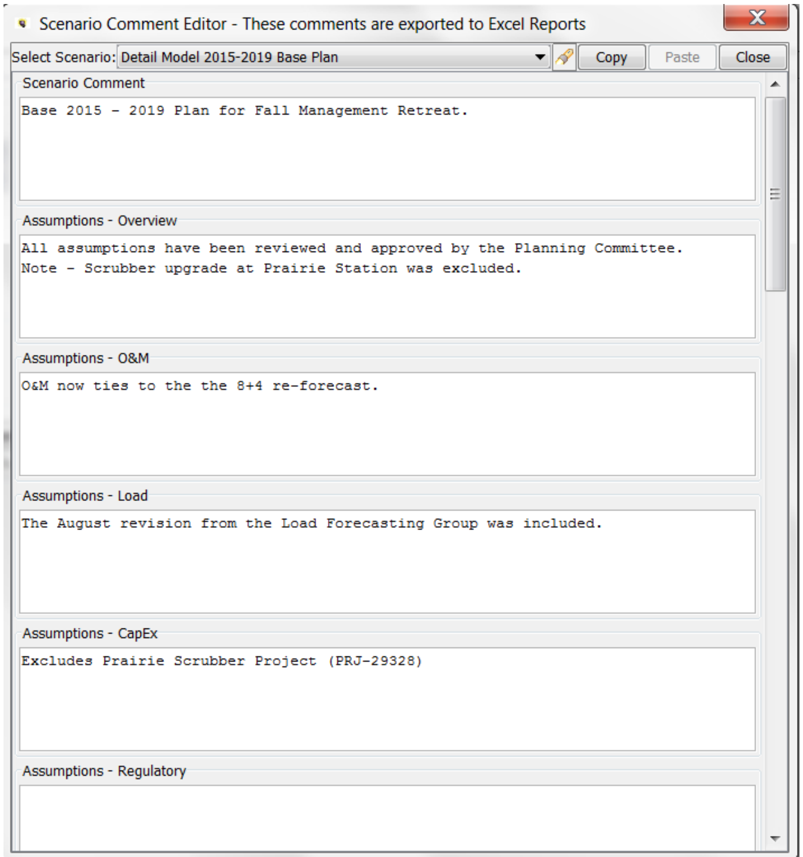
The Other Run Options tab is used to configure two additional settings

- Budget Data Option – choose whether to read the imported data from the database or from a Budget Report
- Escalation/Descalation Options for Calculations
  - Escalation/De-escalation options – choose whether dollars are current and converted to inflated or vice versa
  - Select Schedule – select the escalation schedule to use (CPI, GNP, PPI)
  - First Year for Dollar Conversion – set the first year in which to apply escalation
  - Escalation Schedule – set the escalation percentages to use. Escalations can be annual or by month



Scenario Comments

The Scenario Comments dialog allows the user to populate structured scenario comments. In addition to the core Scenario Comment, there are 20 additional available comment fields. These additional comment fields can be given customized names, such as "Assumptions – O&M" or "Assumptions - Load", as in the below example. These names are assigned using the Core Object Editor (Q2 - Scenario: Comment Description x).



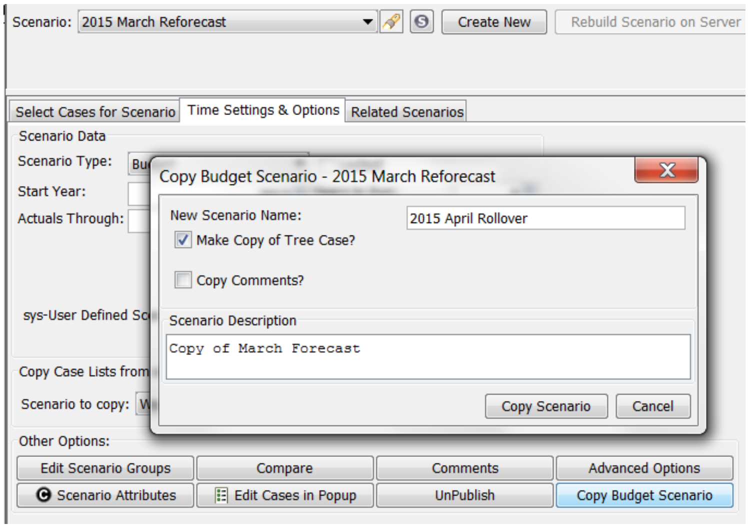
Scenario comments are included on the Scenario Tab in Excel reports.

A	B
Scenario	Detail Model 2015-2019 Base Plan
Scenario Comments:	
Scenario Comment	Base 2015 - 2019 Plan for Fall Management Retreat.
Assumptions - Overview	All assumptions have been reviewed and approved by the Planning Committee. Note - Scrubber upgrade at Prairie Station was excluded.
Assumptions - O&M	O&M now ties to the the 8+4 re-forecast.
Assumptions - Load	The August revision from the Load Forecasting Group was included.
Assumptions - CapEx	Excludes Prairie Scrubber Project (PRJ-29328)
Print Date/Time:	February 19, 2016 14:00:00
Scenario run Date/Time:	2/19/2016 13:59

Copy Budget Scenario

The Copy Budget Scenario button allows the user to quickly make a copy of a given Budget scenario. It makes a copy of the 3rd Attribute case (Scenario Specific Attributes) and optionally, the tree case. All other cases are shared. The New Scenario Wizard and the Define Scenario Wizard Scheme both perform more robust scenario copies, with additional options available to the user.

First select the scenario to be copied, and then hit the Copy Budget Scenario. This will bring up the following dialog. The user can choose whether to copy (or reuse) the Tree Case and/or Scenario comments.

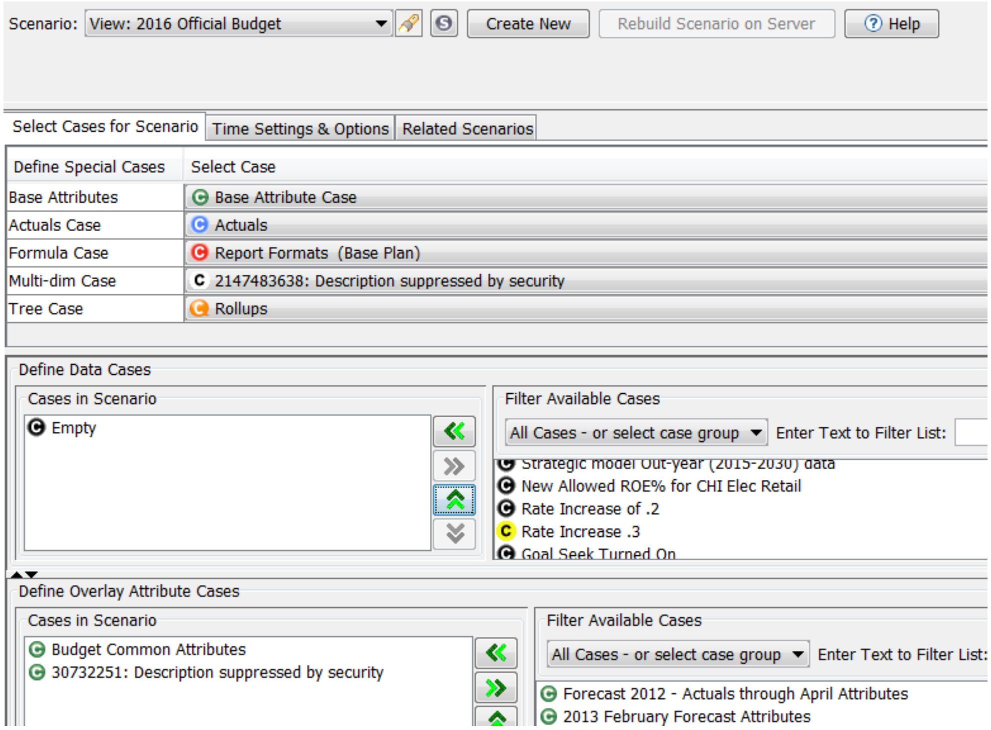


Security and Visibility

Below is information regarding security and visibility related to the Manage Scenarios screen.

Owner Groups

The Manage Scenario tab will only show scenarios and cases that the user has rights to see. If a scenario has a case that the user does not have rights to see, the Manage Scenarios screen still shows all cases, except that this one will be listed with just its Object ID plus "Description suppressed by Security." See the example below.



Also, if a user attempts to make a change to a scenario for which they do not have Edit rights to, the save will fail, and the user will get a warning message to that effect.

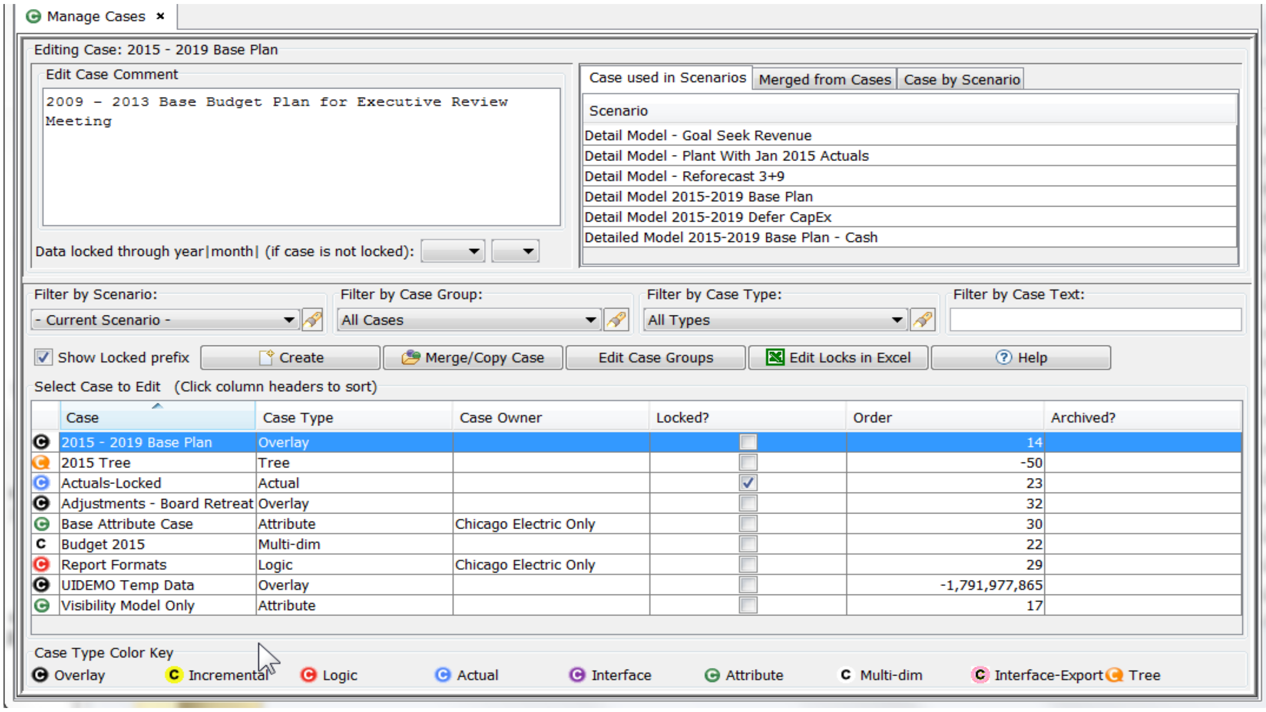
Create Scenario

The Create New Scenario button is disabled if the user does not have the security right to create scenarios.

Visibility

Scenarios and cases that have been set as tagged as Not Visible in the Core Object Editor will not appear on the Manage Scenarios screen.

Manage Cases

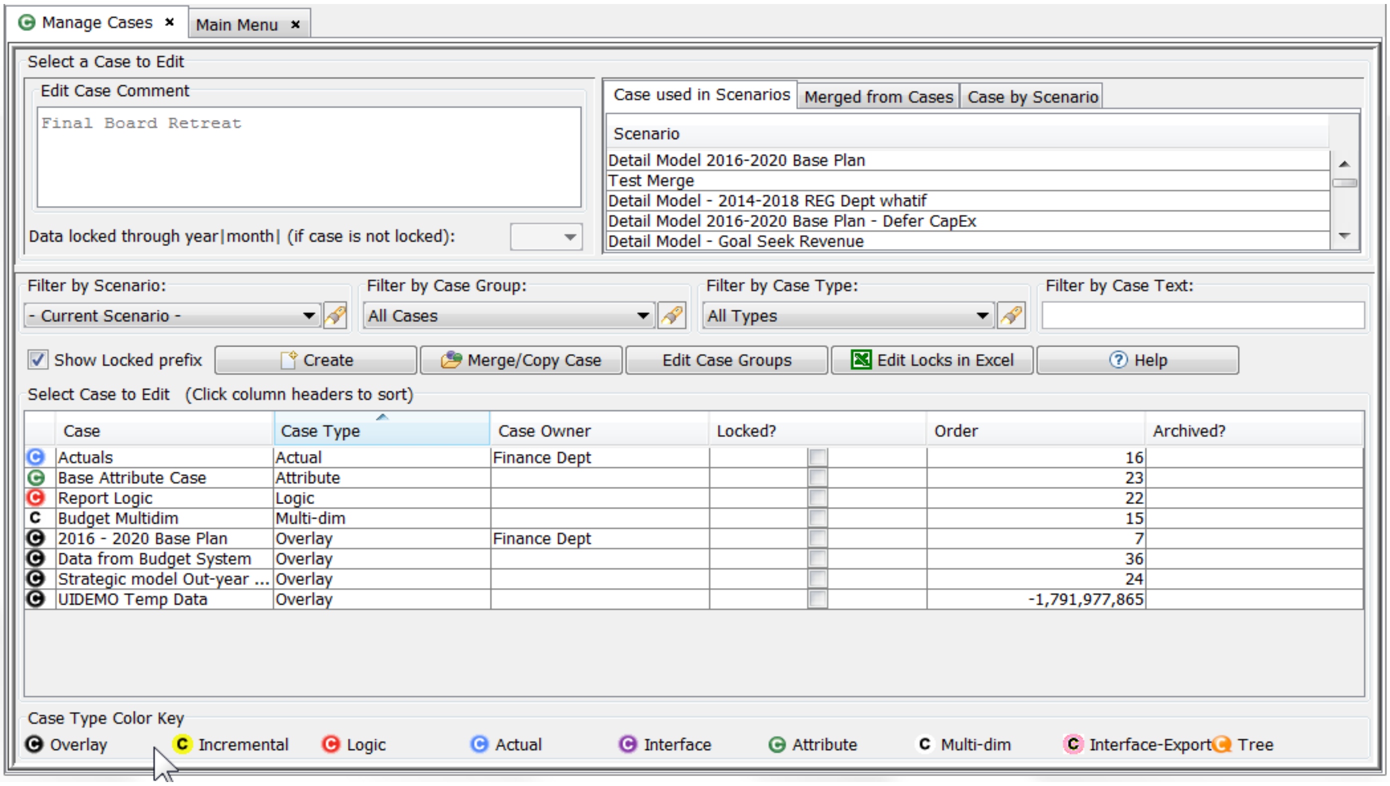


The Manage Cases screen is the core screen where the user can:

- View the case structure of the current scenario or other scenarios. For example, see all cases in the scenario and their locked/unlocked status or owner group
- View information about a case, such as what scenarios it is used in
- Create new cases, either blank new ones or by merging/copying other cases.
- Create Case Groups to make it easier to manage large numbers of cases.
- Lock cases so that the underlying data cannot be accidentally changed.
- Enter case comments.

For further information on how cases are used and what data is stored in each type of case, see Scenarios and Cases.

Screen Layout



The core of the Manage Cases screen is a grid view of cases. The cases in this grid will reflect the filtering options selected by the user. In this grid the user can see the case type, case owner, etc. When the user selects a case in the grid, the top region of the screen shows key information about that case. These include Case Comment (editable), and a set of tabs showing where the case is used, for example). This region also includes selectors to allow the user to lock cases through a specific date (Time Data cases only).

The center of the Manage Cases screen also has a set of buttons that allow the user to create cases, merge cases, etc. See below for details on each of these buttons.

The Manage Cases screen shows all cases visible to the user, with one exception, the Zero case. This case is not shown, as it crosses all scenarios, and cannot be locked.

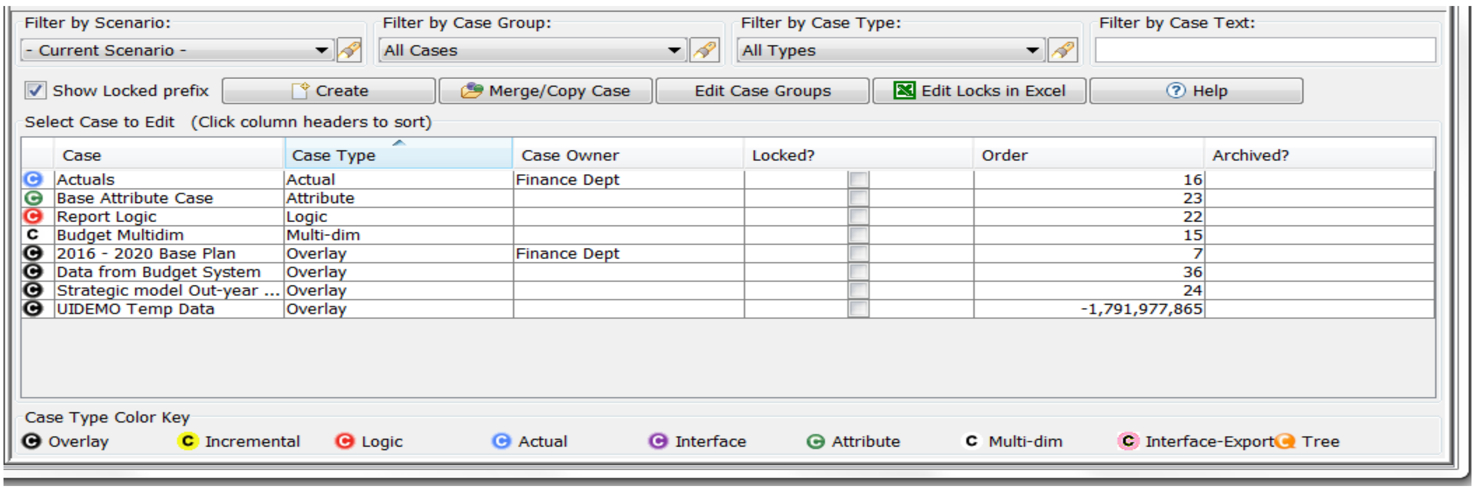
The very bottom of the screen has a key for identifying the various case types by the icon color. For more information on case types, see Scenarios and Cases.

The filtering dropdown boxes are generally displayed in one row, but on low resolution screens they are rearranged into two rows.

Case Grid

The bottom region of the screen, labeled Select Case to Edit contains a list of cases in a grid format and includes filtering and viewing options. It also contains action buttons, which are described below.

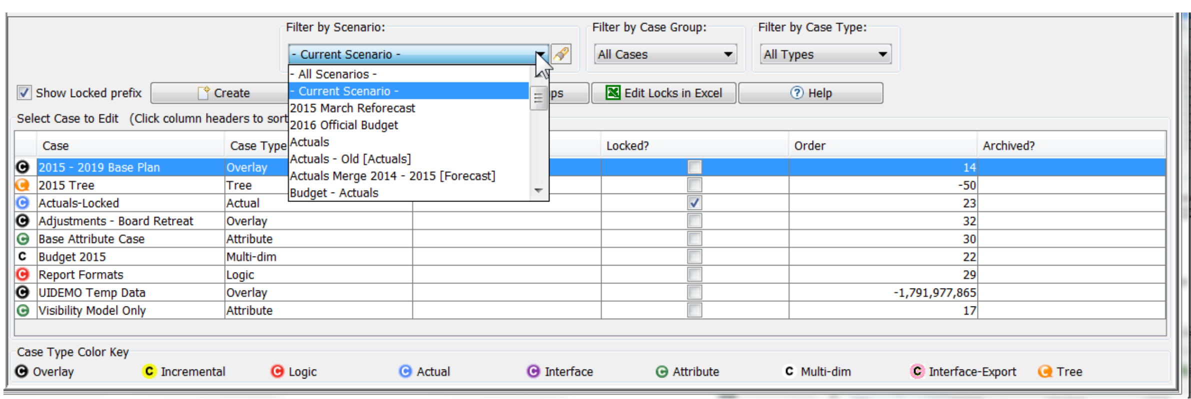
The list of all cases in the current version is displayed in a grid. When a case is highlighted by clicking on it, that case becomes the "active" case, and all information displayed or actions performed here, such as locking or adding comments will apply to that case. The grid also indicates its owner group (if applicable) or if the case has been archived.



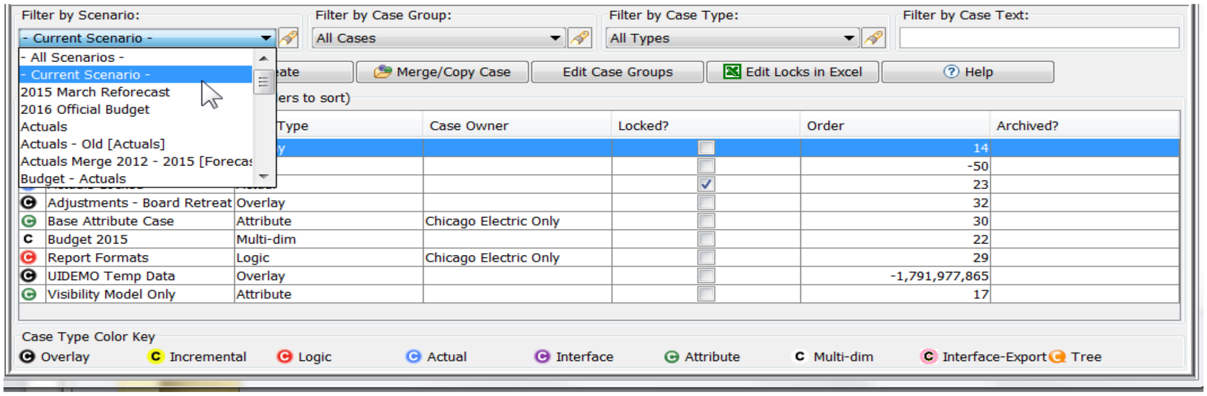
This grid has the standard UIPlanner functionality. It can be sorted by selecting the desired column. It also has right click options on the top row (search, export to Excel, etc.).

There are four options and several action buttons in the bottom region of the screen:

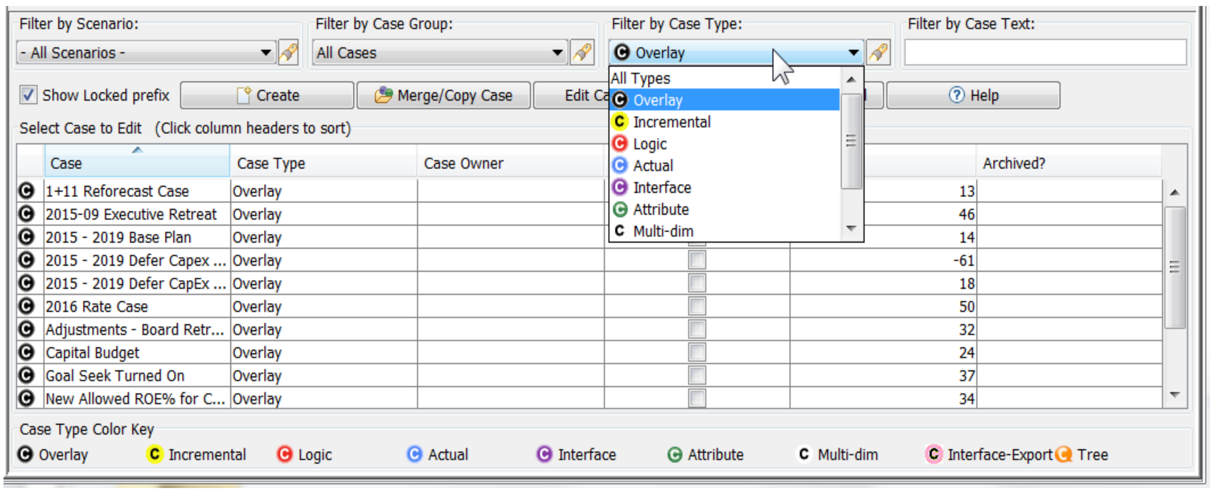
Filter by Scenario: Use the drop-down list to filter the cases on the screen to show only those in a specific scenario



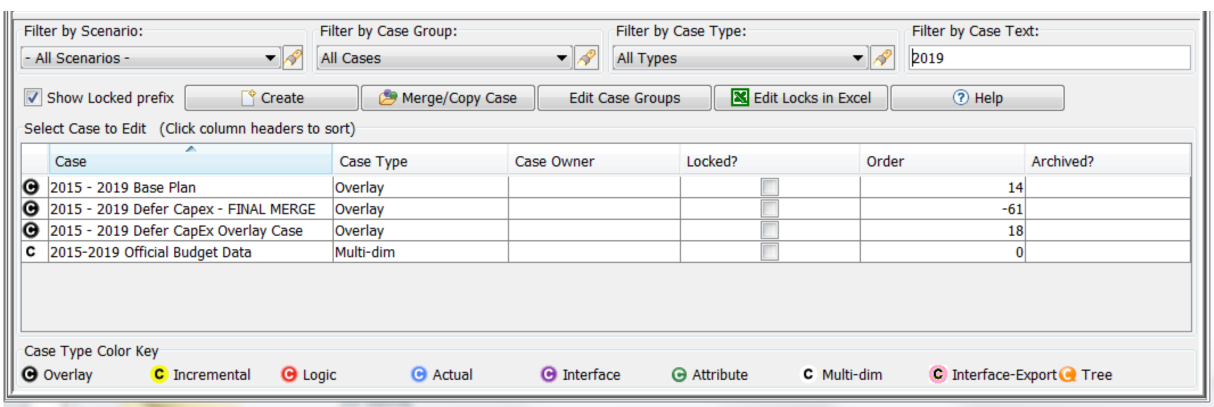
Filter by Case Group: Use the drop-down list to filter the cases on the screen to show only those in a specific Case Group.



Filter by Case Type: Use the drop-down list to filter the case list to only those of a specific type (e.g., Attribute, Logic or Overlay).



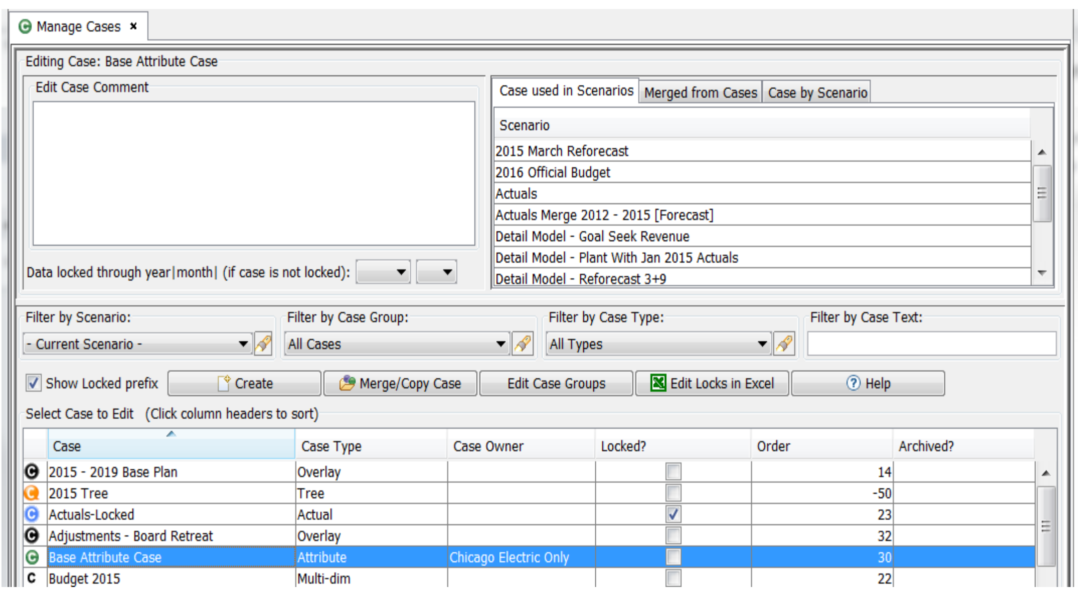
Filter by Case Text: Use the text box to filter the case list.



The action buttons are:

- **Create Case**: Opens the Add Object Dialog to create a new (empty) case. See Create Case for more Information.
- **Merge/Copy Case**: Allows the user to merge the data in several cases into one new case, or copy a single case into a new case. See Merge or Copy Cases for more information.
- **Edit Case Group**: Add Case Groups or add/remove cases from existing Case Groups. These aid in filtering case lists throughout UIPlanner. See Case Groups for more information.
- **Show Locked Prefix**: If this checkbox is selected, all locked cases will have the word “Locked” added to the Case names in the Case Grid (and throughout UIPlanner). Note that this is a User Preference. See below under Lock Cases for more information

Case Information



When a case is selected in the Case Grid, the top region of the screen will show key information about the selected case.

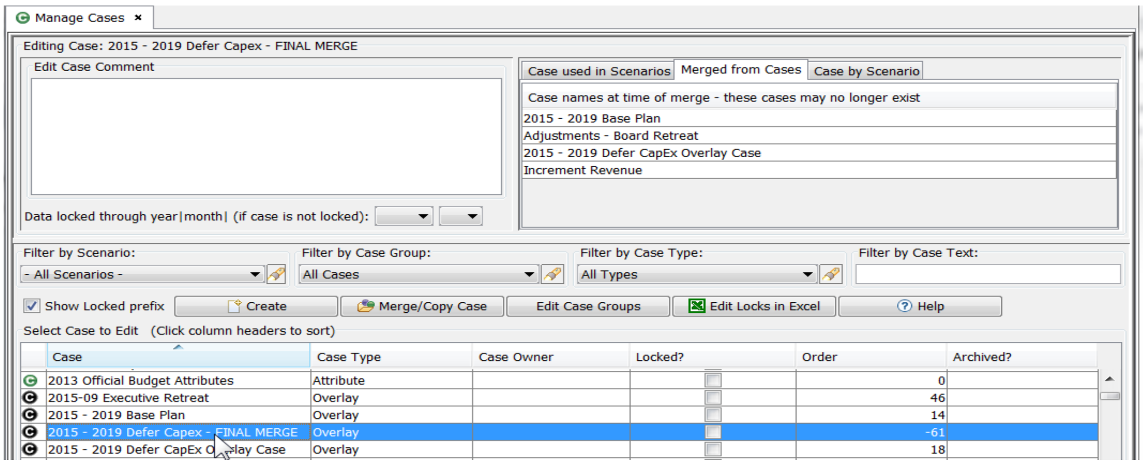
Case Comment - If desired, enter comments for the highlighted case. These comments will be included in the Scenario Info Tab when a UIPlanner report is exported to MS Excel.

Case Information Tabs

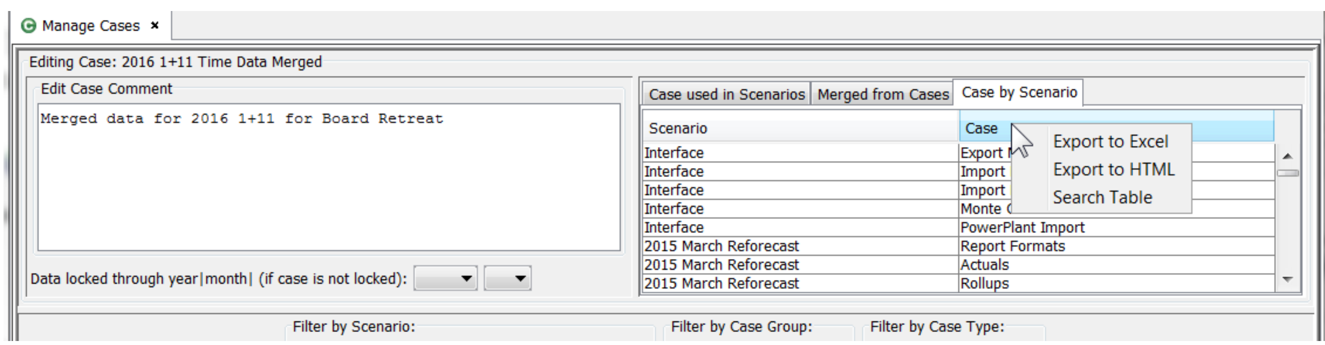
The three tabs in the Case Information region show information about the selected case.

- **Cases Used in Scenarios** - This tab lists all scenarios that the selected case is used in. This can be very helpful in Case/Scenario management. See the screen print above.

- **Merged From Cases** – If the selected case was created using Case Merge/Copy, this tab will list which cases were merged to create that case. Note that this tab lists the Case names at the time of the merge. Be aware that the names could have been changed in the interim or those cases deleted. Also note that it lists names rather than Object IDs (if that case had been deleted, the object ID would no longer exist). With those caveats, this information is still valuable.



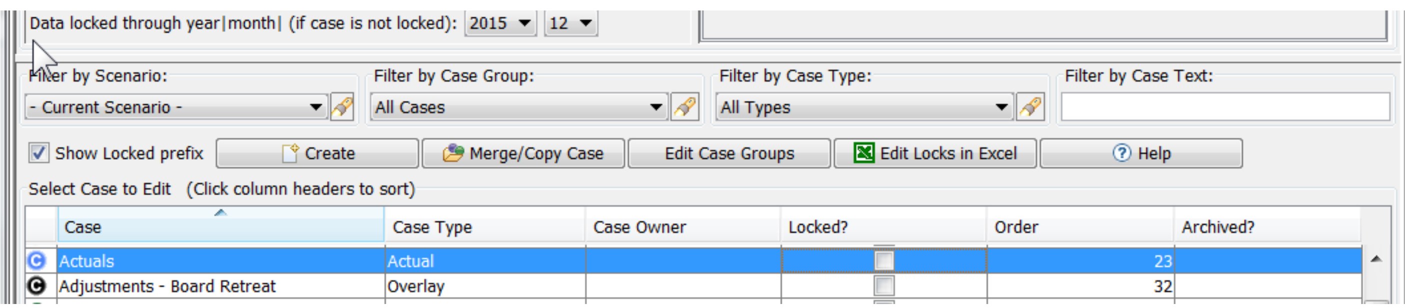
- **Case By Scenario** – this tab provides a tabular listing of all visible scenarios and the cases in each one. This grid can be exported to Excel. This information can also be valuable information for Case/Scenario management. Note that it lists cases that are not used in any scenario.



	Scenario	Case
76	Detailed Model 2015-2019 Base Plan - Cash	Base Attribute Case
77	Detailed Model 2015-2019 Base Plan - Cash	Daily Cash Forecasting
78	Detailed Model 2015-2019 Base Plan - Cash	Locked-2015- 2019 Base Plan
79	Detailed Model 2015-2019 Base Plan - Cash	Demonstrate Model Concepts
80	Detailed Model 2015-2019 Base Plan - Cash	Multi-dim - Empty
81	Working Forecast	Report Formats
82	Working Forecast	Actuals
83	Working Forecast	Rollups
84	Working Forecast	Base Attribute Case
85	Working Forecast	Budget Common Attributes
86	Working Forecast	Working Forecast Attributes
87	Working Forecast	Time Data - Empty
88	Working Forecast	Working Forecast Data
89	Not in any scenario	Budget 2016 Attributes
90	Not in any scenario	Forecast 2016 - Actuals through April Data
91	Not in any scenario	Ledger Data
92	Not in any scenario	What-If Scenario Data
93	Not in any scenario	Targets 2016 Data
94	Not in any scenario	Budget Actuals Data
95	Not in any scenario	Budget 2016 Data

Data Locked through Year/Month

If the selected case is a Time Data case (Overlay, Incremental, or Multidimensional), there are drop-down boxes that allow the user to selectively lock the case through a specific date (e.g, through the latest Actuals Date) but allow users to enter data for forward periods. A typical usage would be once actuals data (e.g., Ledger Data) is entered for a given month, the case is locked through that month, thus preventing accidental edits to the actual data.



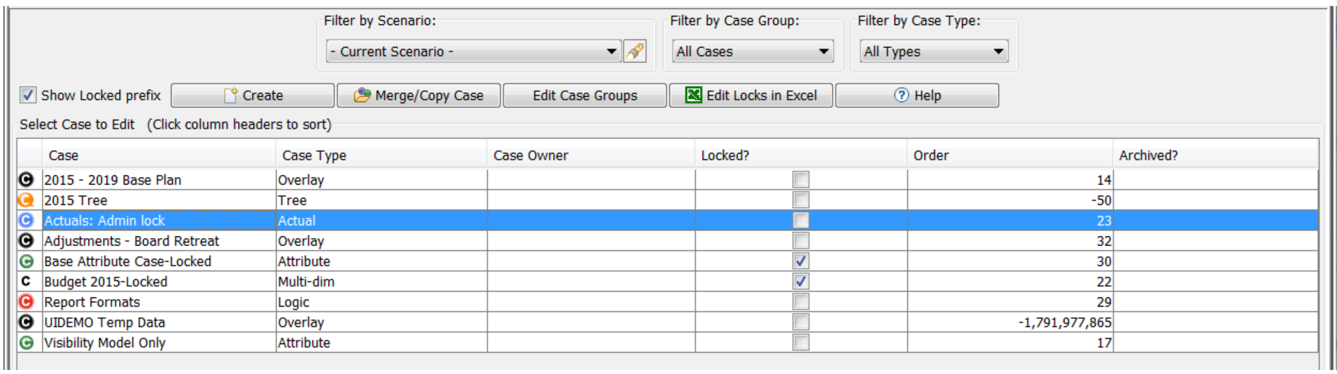
Note that this lock is applicable to cases that are not globally locked using the Lock checkbox in the Case Grid below.

Locking Cases

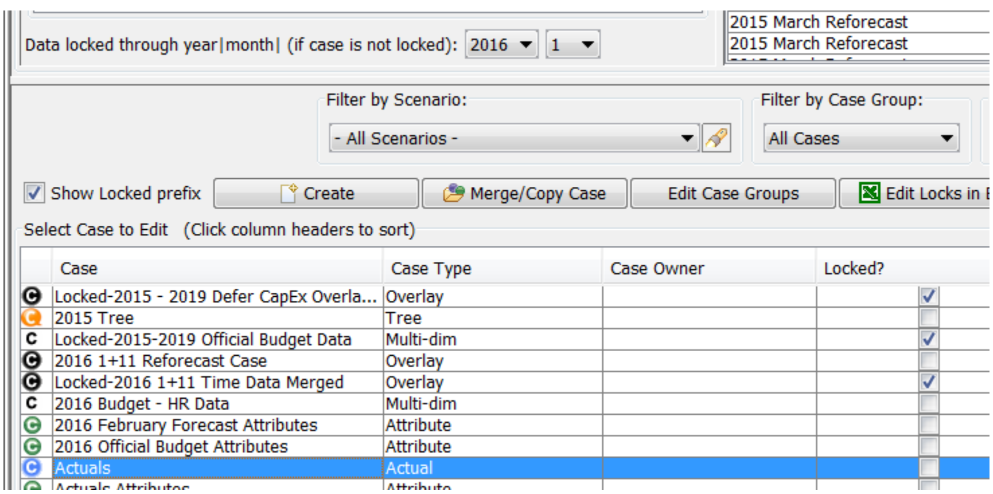
In the Manage Cases screen, users can lock cases in two ways.

- Locked? Checkbox – this checkbox locks the case, so that no changes can be made. Note that there is a button that exports all cases in the grid to Excel, allowing the user to set the locked switches there and import the changes to the database.
- Lock Through Date - this locks the case only through a specific month/year (see Case Information for this option).

Note – there is an additional more global locking mechanism (Admin Lock) available in the Core Object Editor. If a case has been Admin Locked, it will indicate as such in the case grid. See below.

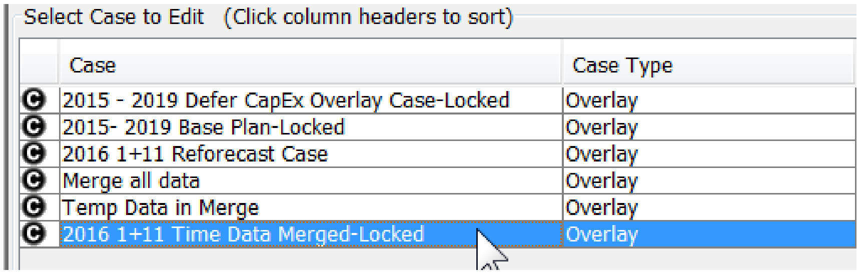


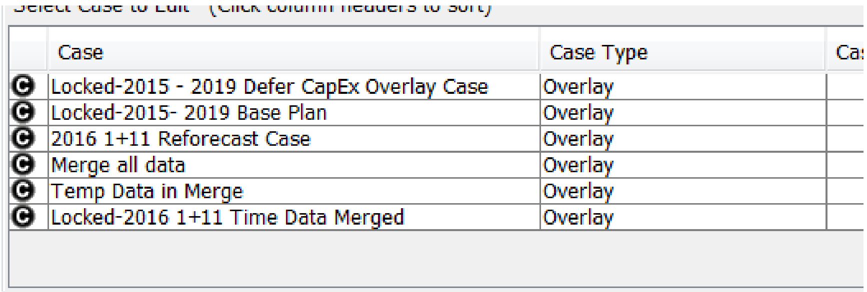
The grid adds the word "Locked" to the names of all locked cases. Note that there is a checkbox that allows the user to NOT display the Locked indicator. This is a user preference item.



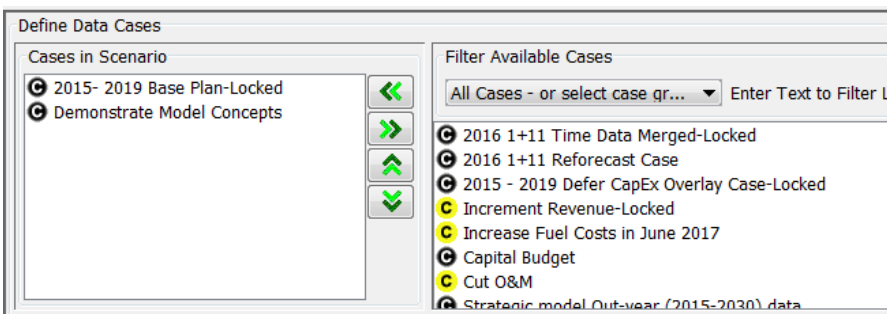
If the user chooses to display the Locked indicator, there is a User Preference option to have the word Locked appear in front of the Case name or at the end. See User Preferences.

Below are the two views of the Locked indicator. Many users choose to have the Locked indicator at the end, since the cases are then more easily sorted alphabetically.





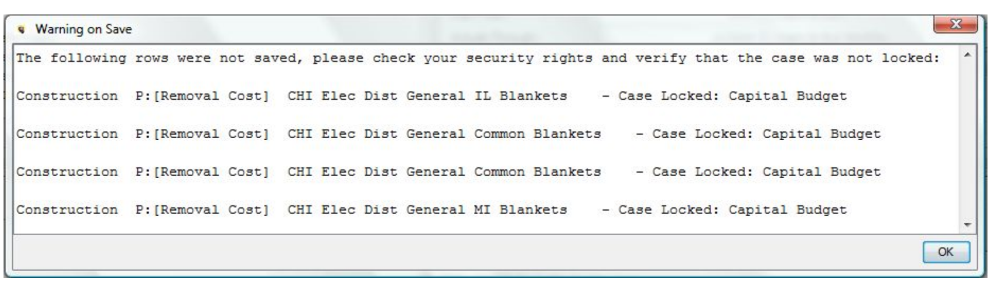
Note that the Locked Indicator applies to all references to cases throughout UIPlanner. See the example below from Manage Scenarios.



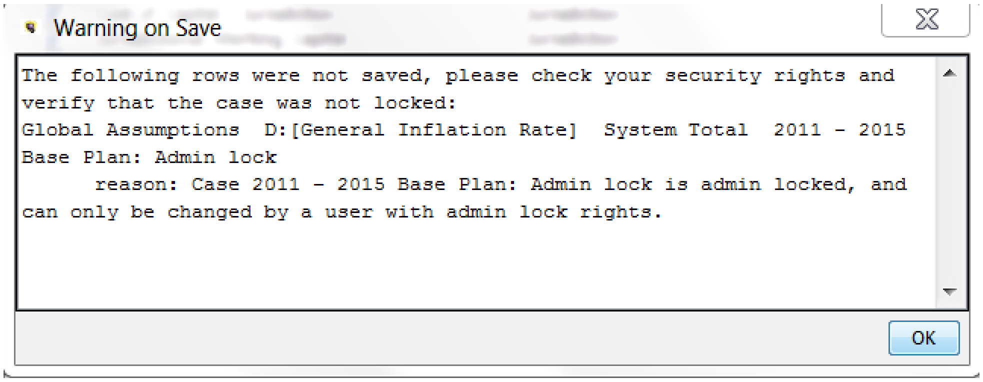
User Messages – Locked Cases

Data in a locked case cannot be changed, regardless of the user's security. If a user tries to change data in a locked case, the model will provide an error message indicating that the case is locked. See below.

Case Lock/ Locked through Date.

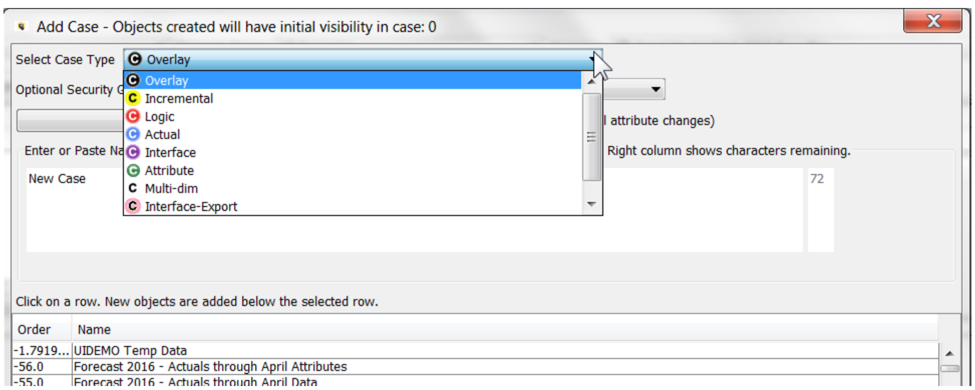


Admin Lock



Create Case

To create a new case, click the Create button in the middle of the screen. This will bring up the Add Object dialog. Select the Case Type (Overlay Time data is the default)



See Add Object Dialog for further information.

Once a case has been created, its Case Type cannot be changed. However, in the Core Object Editor, users can (if they have security to do so):

- Change the name of a case.
- Change the overall order of cases.
- Change the visibility of (hide) a case.
- Assign an Owner Group to a case.
- Delete a case

See Core Object Editor for more information.

Note: The Create Case button is disabled if the user does not have the security right to create cases.

Merge/Copy Cases

UIPlanner allows the user to copy cases or to merge multiple cases into a new case. This is a valuable capability to assist in scenario/case data management. For example:

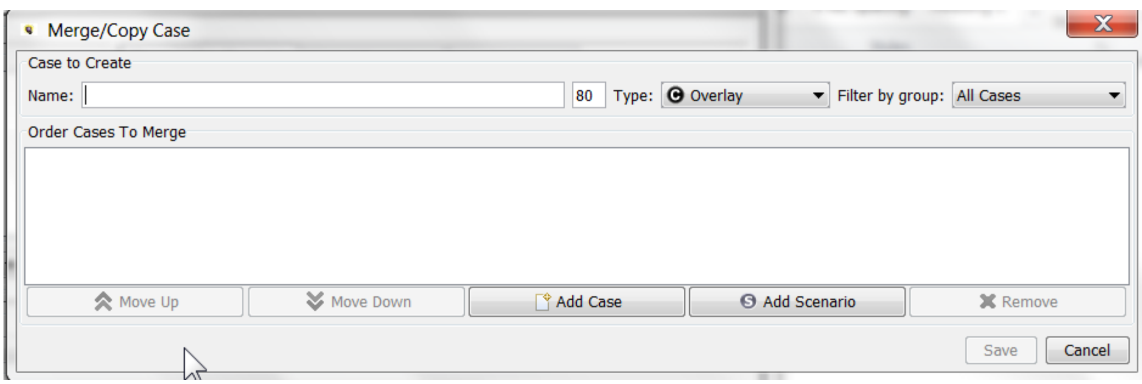
- Once an approved forecast is completed (possibly containing many cases) the user can merge all time data cases into one case, thus simplifying the case structure.
- To do a what-if for testing possible changes to calculations, copy the Formula case and make the changes in the new copy.

Note that while users can make a complete copy of a scenario by merging/copying each case, UIPlanner includes toolsets specifically designed for this purpose:

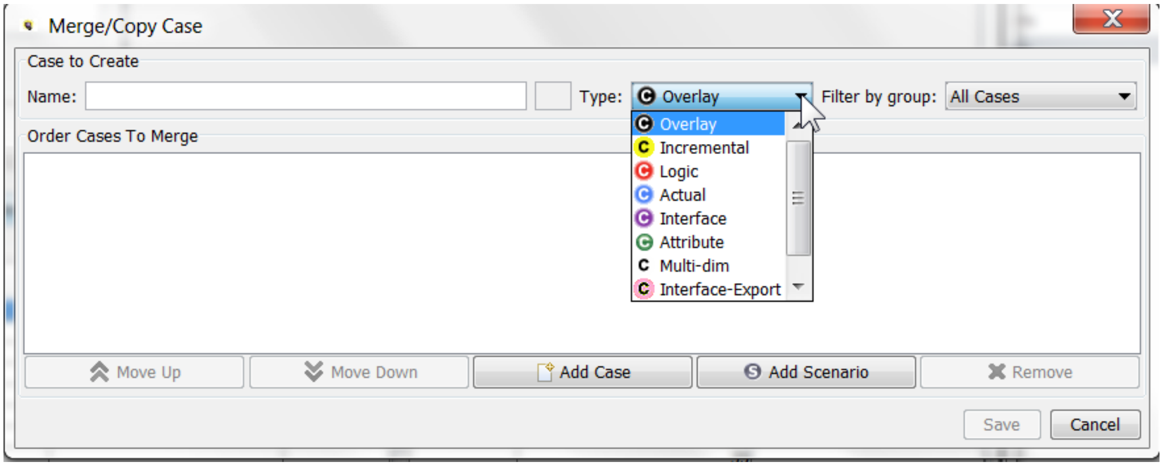
- **New Scenario Wizard** – provides a step by step walkthrough of the scenario copy process
- **Define Scenario Wizard Scheme** – allows the user to define a scenario copy template and launch it from a switch-board.

Below are the steps to merge or copy cases using the Manage Cases screen.

1. Select the Merge Copy Case button. This will bring up the following dialog



2. Select the Case Type for the new case. Only cases of the same type can be merged. Note that Overlay and Incremental are both Time Data case types, and can thus be merged

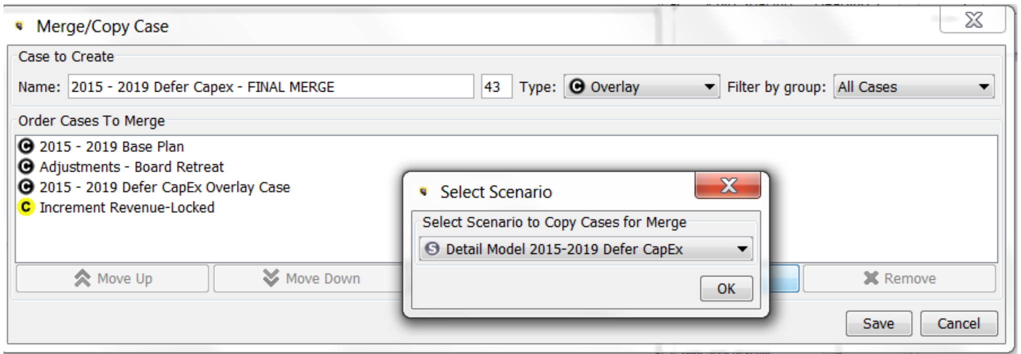


3. Type the desired case name in the Text Box. It needs to be fewer than 80 characters – the text box will indicate how many are remaining.
4. Select the cases to merge. These can either be selected individually or by selecting a scenario, which will pre-populate the case list. See Select Scenario (below).

Select Scenario - Users typically use Select Scenario to merge cases. This option shows only the cases in that scenario and preserves the ordering (important).

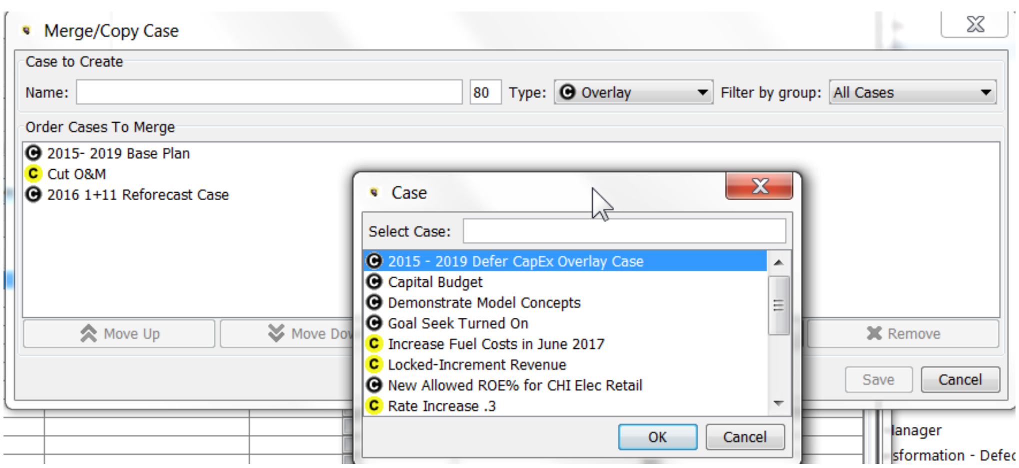
- Select the Add Scenario button
- Select the desired Scenario to merge from and select OK. This will populate all the cases of the selected type into the Case list, in the same order as in the source scenario. Note the User Temp Data case cannot be included in a merge (it can be copied, however).

- If desired, the cases can be reordered, or additional scenarios or cases added to the list.



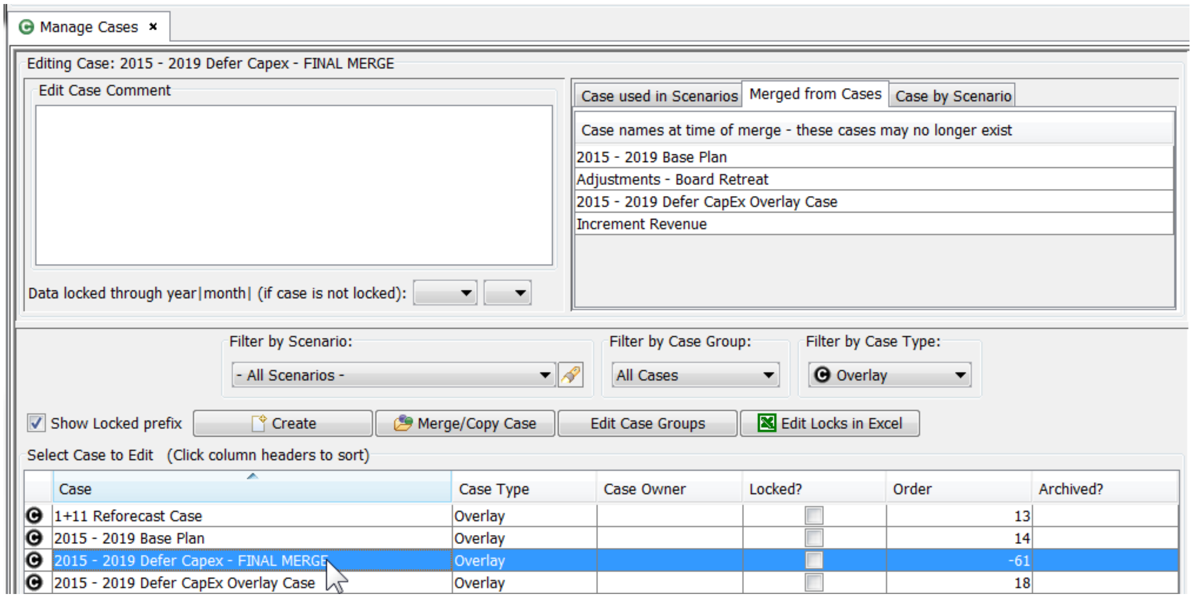
Select Case - To copy a specific case, users will often use Select Case.

- Select the Add Case button.
- Find the case in the list and use the << arrow to add it to the case merge box.
- To copy a case, include only that case in the Case List. To merge cases, other cases can be manually added. To copy the User Temp Data case into a case that can be shared with other cases, select it and copy it by itself.



Note that the Case Groups dropdown is available to simplify the case list.

Once the case merge list is populated, select the Save button. This will perform the Merge/Copy process, using Winner logic to determine final values in the merged case. The newly created case will then show up in the Case Grid. Also, the Case Information at the top of the screen will show the relevant information for that case. See the example below.



Other Information on Merged/Copied Cases

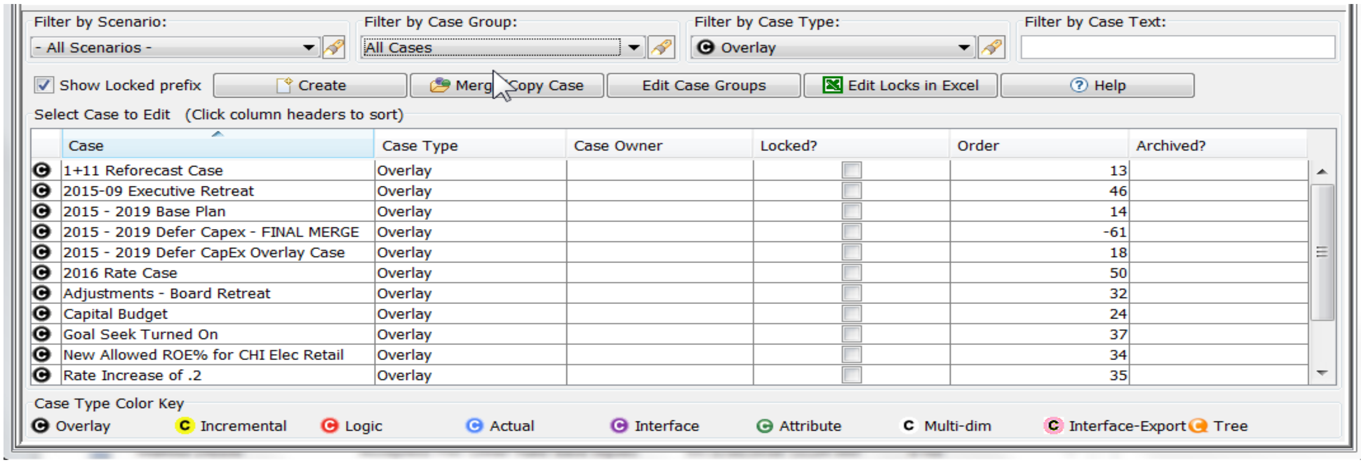
Some additional information on Case merges:

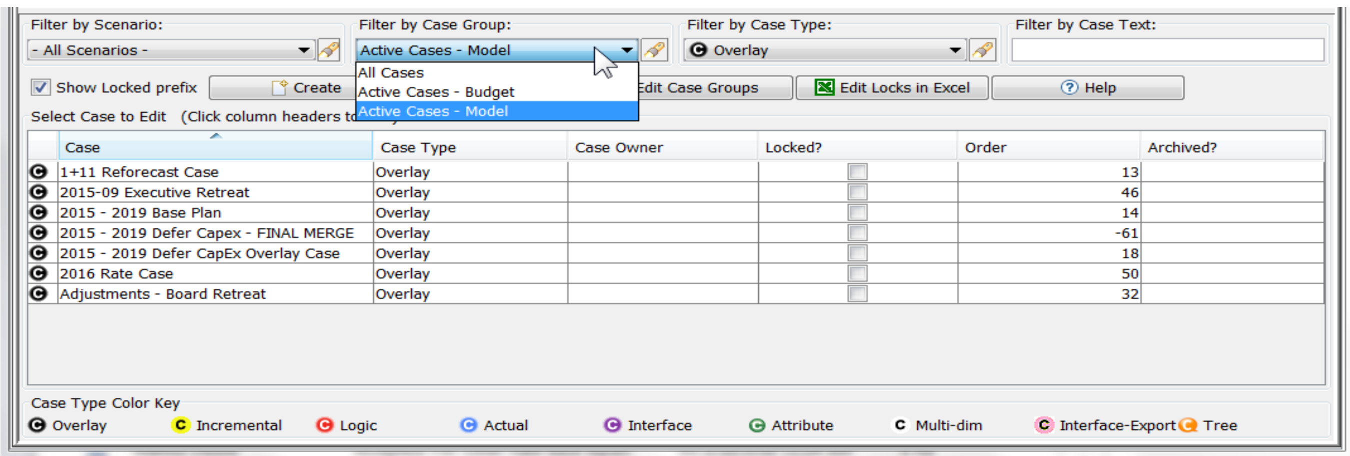
- When multiple cases are merged, the individual data rows preserve the User ID and Time/Date stamp from the original case. Where winner logic is applied, the winner case information is used. The Case in which the data was originally stored is not retained.
- If the first case in the Merge/Copy list has an Owner Group, the new case will inherit it
- The Case Group membership of the new case is inherited from the first case in the merge/copy list.
- The Merge/Copy Case button is disabled if the user does not have the security right to create cases.

Case Groups

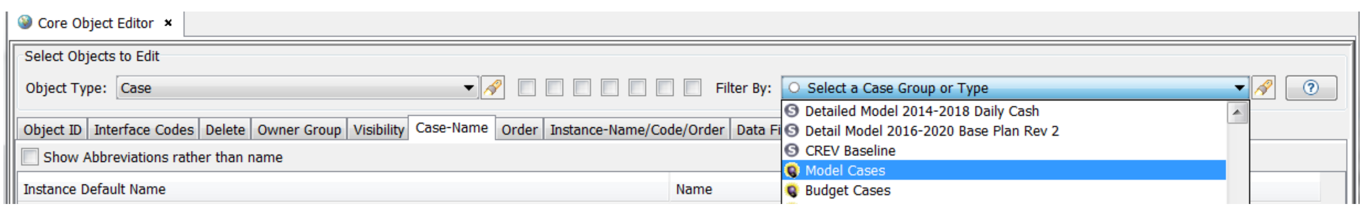
Case Groups are a construct that allows users to set up custom categorizations of cases. Cases can be listed in one or more Case Groups. Once set up and populated, these allow uses to filter down the case list by selecting a Case Group.

Below is the Case grid without and then with a Case Group selected. Note how the Case Group simplifies the list.



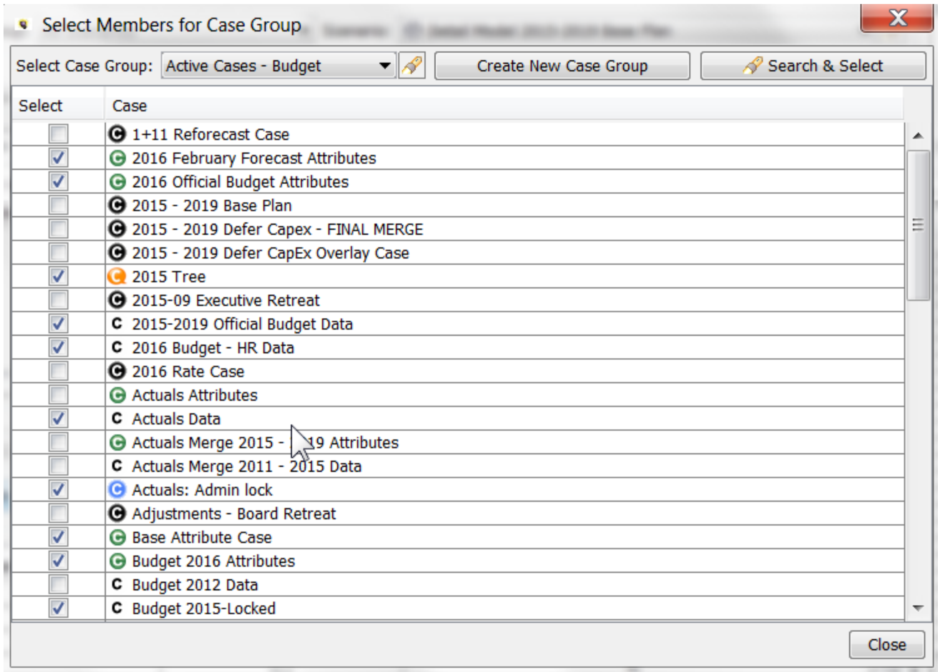


Case Groups are also available as a filtering device in the Core Object Editor.



Case Groups Screen

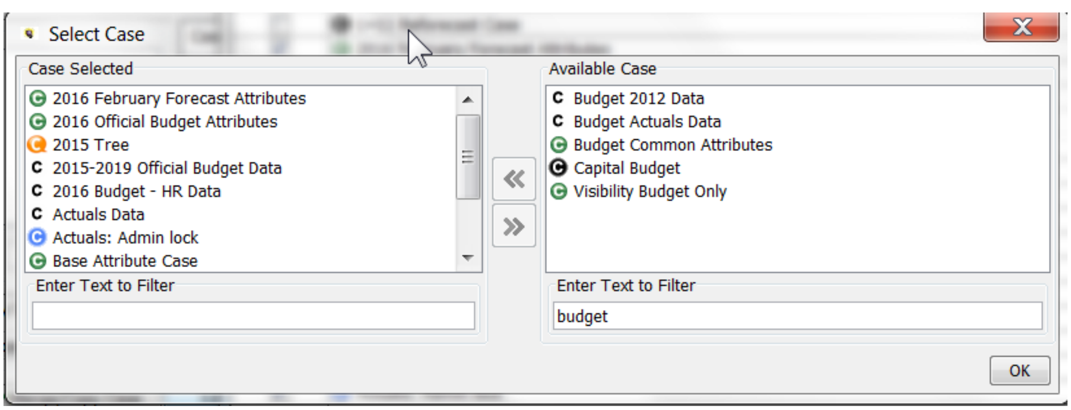
Below is the screen for defining Case Groups and assigning (removing) Cases from specific Case Groups. This screen is launched by clicking on the Edit Case Groups button.



To add or remove cases from a Case Group, select the Case Group from the drop-down list.

To add a case to the group, check the checkbox; to remove it, uncheck the box. Alternatively, select the Search and Select box. This will bring up a dialog with the current group members on the left, and remaining available cases on the right. User the << and >> arrows to move cases in and out of the Group. Hit OK to close the dialog. The checkboxes will reflect the case selections from the dialog.

Note that once a case group is set up (such as Active Cases), it will need to be monitored on an ongoing basis to ensure that it contains all relevant cases, and that cases no longer relevant are removed.



Create Case Group

The create Case Group button brings up the Add Object Dialog. Type in the desired name and hit the Add button. This will add the new Case Group to the list.

Delete Case Group

Use the Core Object Editor to delete or hide a Case Group

Security and Visibility

Notes regarding security and visibility related to the Manage Cases screen.

Owner Group

Cases with Owner Groups that the current user does not have at least View rights to will not appear in the Case Grid. In the Case by Scenario tab, they will be listed as “description suppressed by security”. Scenarios that the user does not have View rights to will not appear in the Case Info section tabs.

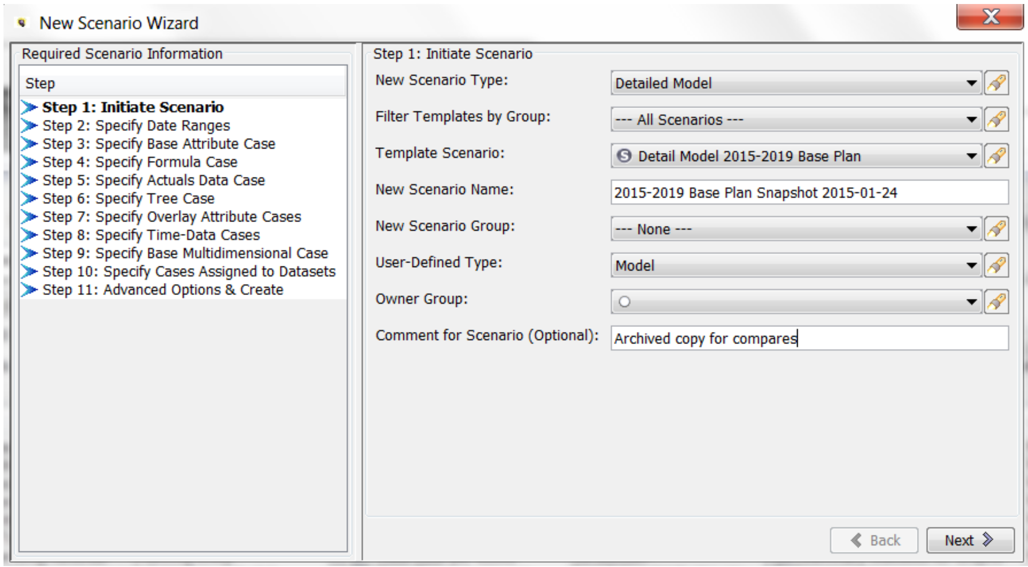
Visibility

Scenarios and cases that have been set as tagged as Not Visible in the Core Object Editor will not appear on the Manage Cases screen.

Create Cases / Merge/Copy Case

The Merge/Copy Case button is disabled if the user does not have the security right to create cases.

New Scenario Wizard



The New Scenario Wizard screen simplifies the process for creating a new scenario. It has screens that walk the user through the required steps in a logical order.When the user has made all the selections, the system builds the new scenario. It does the copying of cases and published datasets in one step, freeing the user from having to make case copies and assemble the scenario. This not only saves time, but also prevents possible errors.

Access to the New Scenario Wizard is generally restricted (via Menu Profiles) to a limited group of users. If a user does not have the Create Scenario right, they will not be able to run the New Scenario Wizard, and will receive a warning message.

The New Scenario Wizard screen is best suited for ad hoc scenario copies. The Define Scenario Wizard Scheme process allows the user to set up a predefined template for copying a scenario at the push of a button. See the Define Scenario Wizard Scheme.

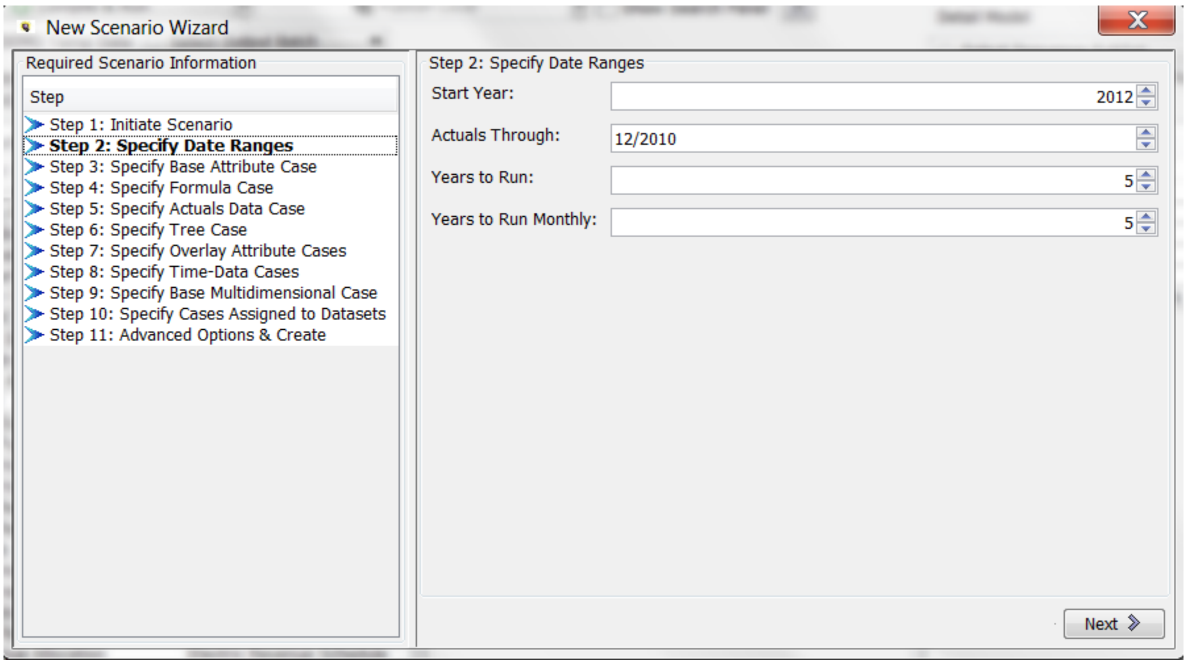
Below are the various tabs in the New Scenario Wizard. Hitting the Next button takes the user to the next tab in the Wizard. The user can also select the steps individually on the left, if they want to go back in the process.

Initiate Scenario Tab

The user begins by selecting a template scenario and giving the new scenario a name (see above). The user can also select scenario options, such as its Scenario Group or Owner Group.

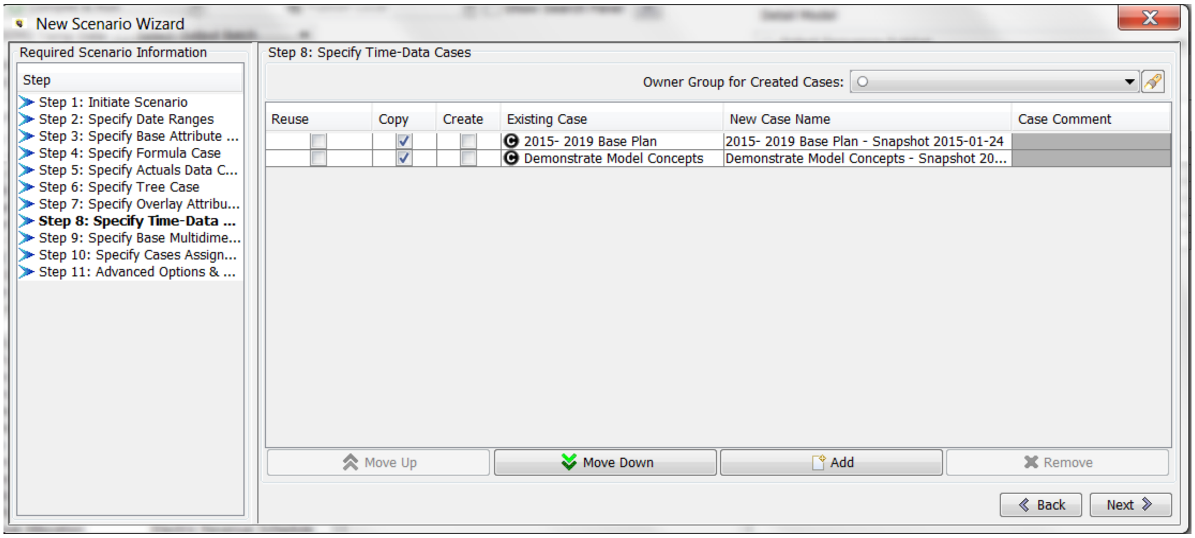
Specify Date Ranges Tab

The specify Date Ranges tab allows the user to keep the same scenario settings (Start Year, Years to run, etc) or change them.



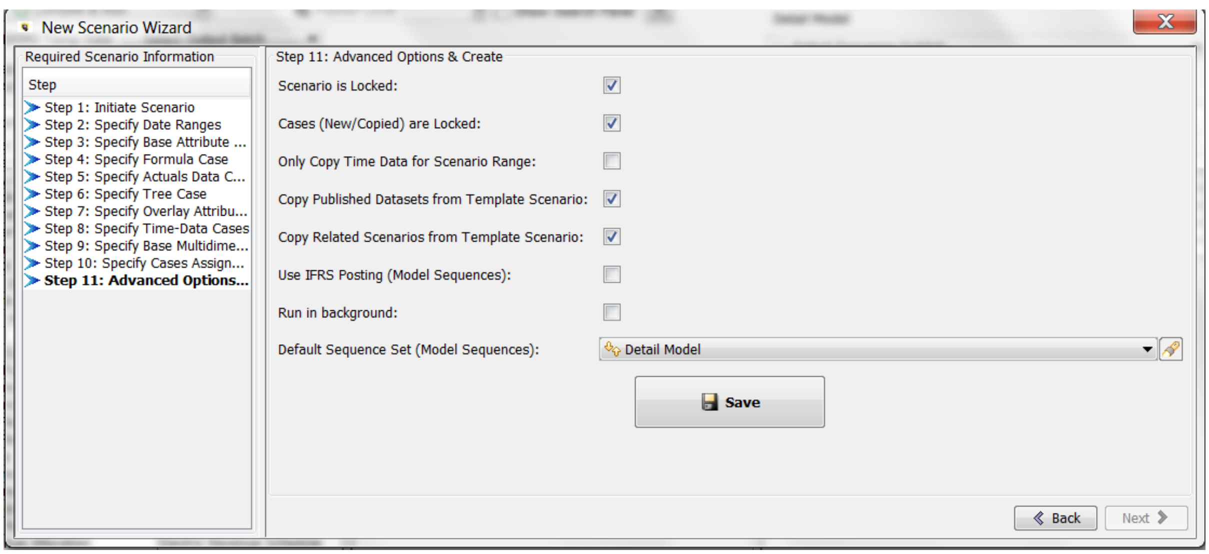
Specify Cases Tabs

For each of the case types, the appropriate tab in the wizard allows the user to choose whether to reuse (share) the case(s) in the Template Scenario or to make copies of them. Below is an example from the Time Data Cases tab

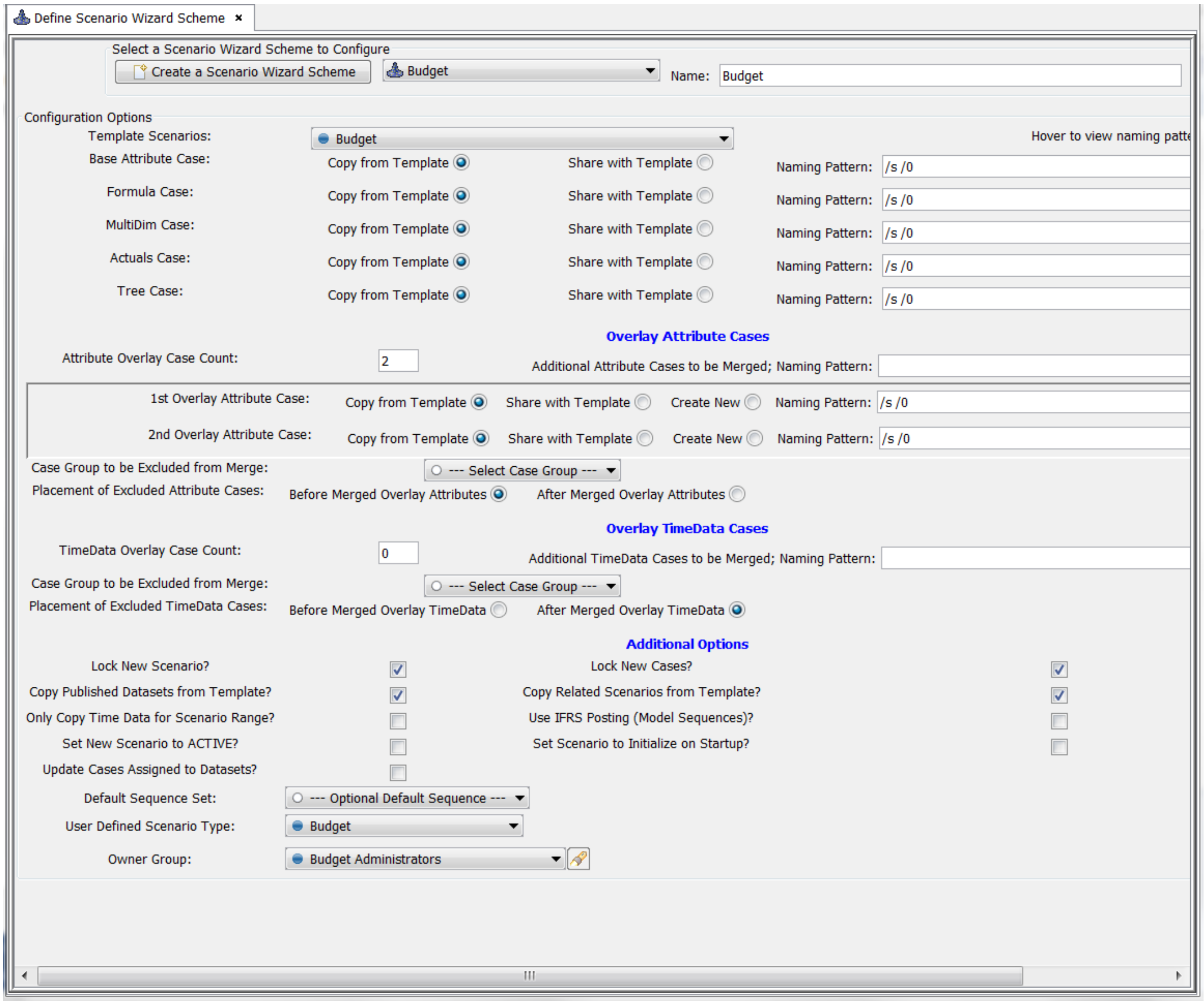


Advanced Options & Create Tab

The last screen of the wizard allows the user to make final settings, such as locking all cases and locking the scenario. Upon hitting Save, the system will make the required copies of all cases and create the scenario.



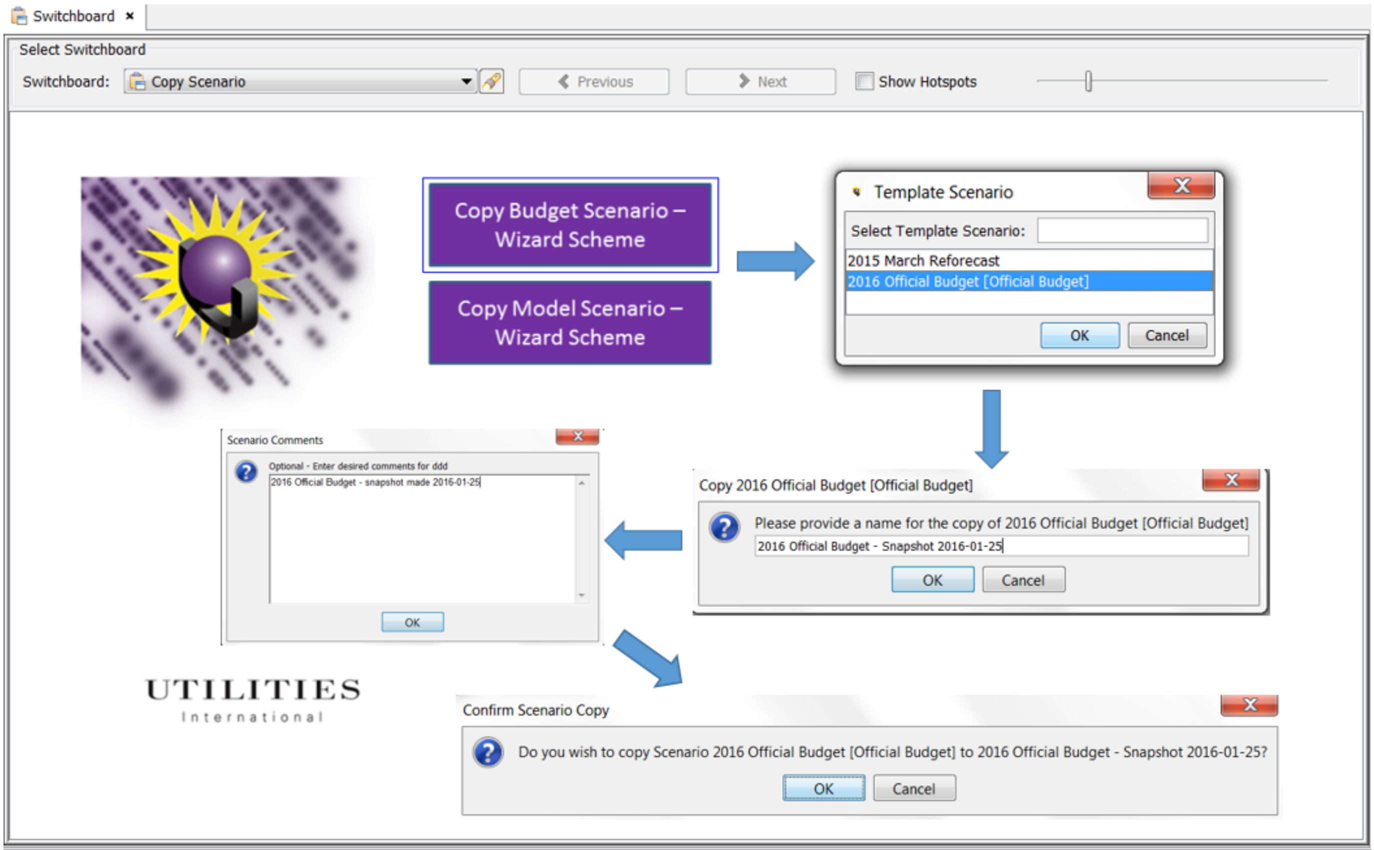
Define Scenario Wizard Scheme



The Define Scenario Wizard Scheme screen allows the user to set up a predefined set of rules and settings for the Scenario Wizard. The user can then launch this on demand, without having to walk through the New Scenario Wizard each time. A typical use of this feature is to give System Administrators a push-button process for snapshotting scenarios. This feature is most suited for clients who have a well-defined Scenario/Case management process, since this screen systematizes that.

One feature to note is that the Define Scenario Wizard Scheme allows the user to merge cases as part of the process. This is a feature that is not part of the New Scenario Wizard, which copies (or reuses) each individual case. Having the merge feature is key to the Wizard Scheme reusability, because it is not tied to the number of cases in the source scenario.

The Define Scenario Wizard scheme is called from a switchboard class. The end user only needs to make a few decisions, such as selecting the template scenario and giving the new scenario a name. Since the System Administrator has pre-defined the copy behavior and settings, the end user launching the copy is freed from making the underlying decisions. The Wizard Scheme does the rest. Below is the process.



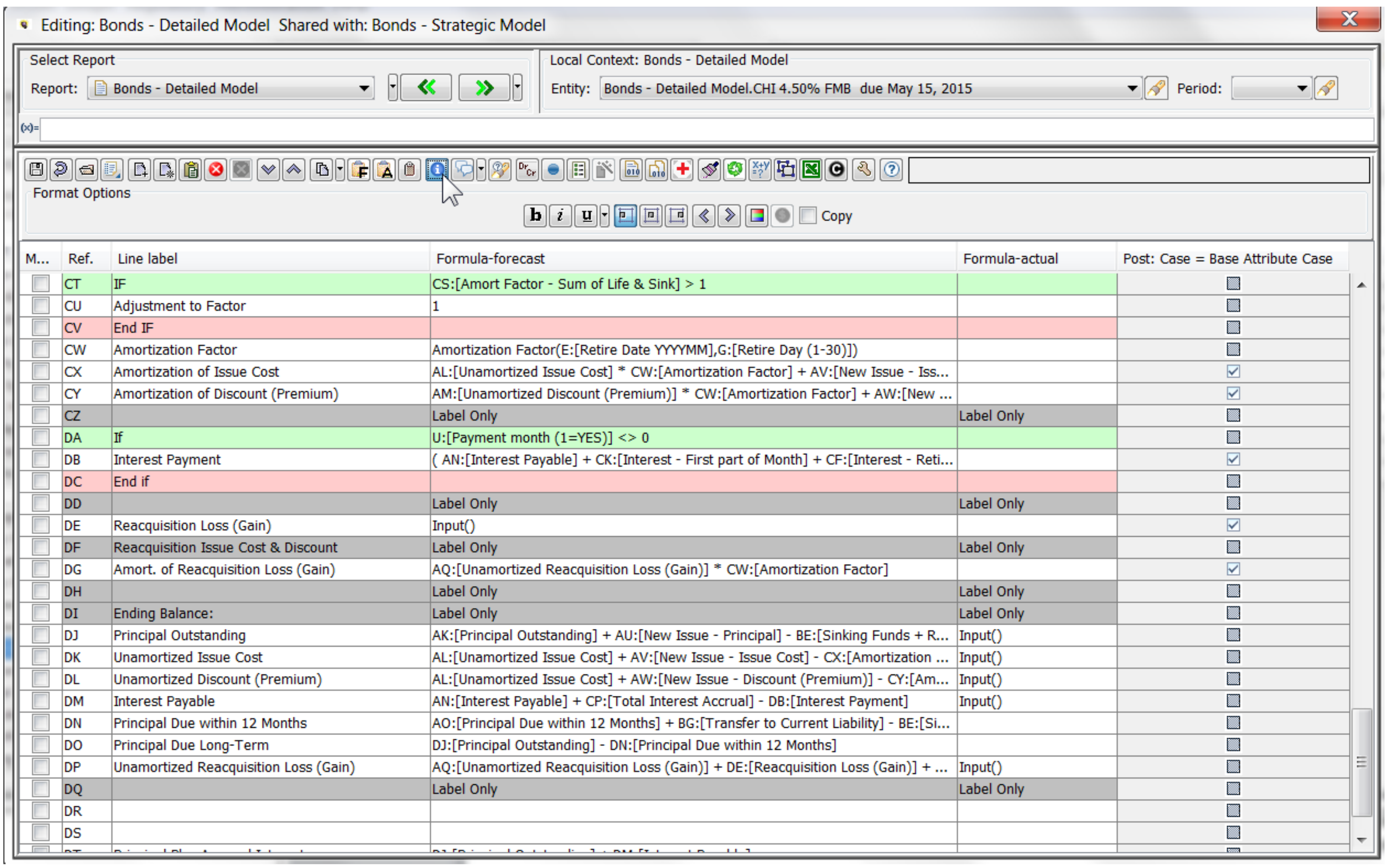
Access to the Define Scenario Wizard Scheme is typically restricted to System Administrators through use of Menu Pro-files. Additionally, the launching of the scheme is typically on a System Administrator switchboard, with access granted only to those users able to create scenarios

Edit Calculations

The Edit Calculations screen (also referred to as the "Calculation Editor") is the tool that users use to build reports or instruction sets, which are the calculations that are used to implement the organization's business logic. It is one of the most visible and widely used of the tools available to users. The Calculation Editor is used in all types of UIPlanner implementations and scenario types.

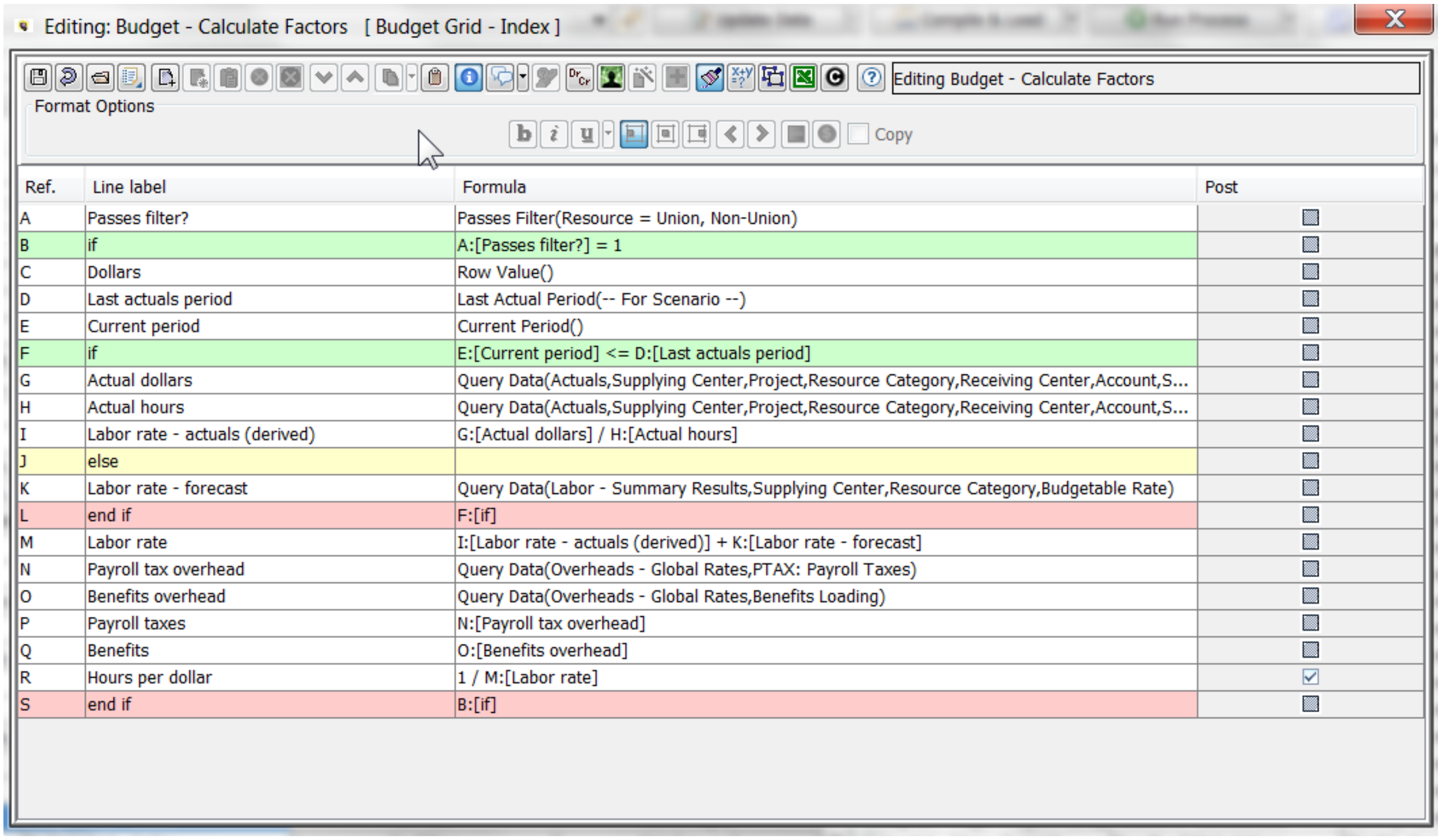
Below are two examples, one from a Financial Model calculation, and another from a multidimensional instruction set. The Calculation Editor may differ slightly by scenario type or by the sequence set, but the core functionality and operation are essentially the same.

Financial Model – Bond Calculation



M...	Ref.	Line label	Formula-forecast	Formula-actual	Post: Case = Base Attribute Case
	CT	IF	CS:[Amort Factor - Sum of Life & Sink] > 1		
	CU	Adjustment to Factor	1		
	CV	End IF			
	CW	Amortization Factor	Amortization Factor(E:[Retire Date YYYYMM],G:[Retire Day (1-30)])		
	CX	Amortization of Issue Cost	AL:[Unamortized Issue Cost] * CW:[Amortization Factor] + AV:[New Issue - Iss...		✓
	CY	Amortization of Discount (Premium)	AM:[Unamortized Discount (Premium)] * CW:[Amortization Factor] + AW:[New ...		✓
	CZ		Label Only	Label Only	
	DA	If	U:[Payment month (1=YES)] <> 0		
	DB	Interest Payment	(AN:[Interest Payable] + CK:[Interest - First part of Month] + CF:[Interest - Reti...		✓
	DC	End if			
	DD		Label Only	Label Only	
	DE	Reacquisition Loss (Gain)	Input()		✓
	DF	Reacquisition Issue Cost & Discount	Label Only	Label Only	
	DG	Amort. of Reacquisition Loss (Gain)	AQ:[Unamortized Reacquisition Loss (Gain)] * CW:[Amortization Factor]		✓
	DH		Label Only	Label Only	
	DI	Ending Balance:	Label Only	Label Only	
	DJ	Principal Outstanding	AK:[Principal Outstanding] + AU:[New Issue - Principal] - BE:[Sinking Funds + R...	Input()	
	DK	Unamortized Issue Cost	AL:[Unamortized Issue Cost] + AV:[New Issue - Issue Cost] - CX:[Amortization ...	Input()	
	DL	Unamortized Discount (Premium)	AL:[Unamortized Issue Cost] + AW:[New Issue - Discount (Premium)] - CY:[Am...	Input()	
	DM	Interest Payable	AN:[Interest Payable] + CP:[Total Interest Accrual] - DB:[Interest Payment]	Input()	
	DN	Principal Due within 12 Months	AO:[Principal Due within 12 Months] + BG:[Transfer to Current Liability] - BE:[Si...		
	DO	Principal Due Long-Term	DJ:[Principal Outstanding] - DN:[Principal Due within 12 Months]		
	DP	Unamortized Reacquisition Loss (Gain)	AQ:[Unamortized Reacquisition Loss (Gain)] + DE:[Reacquisition Loss (Gain)] + ...	Input()	
	DQ		Label Only	Label Only	
	DR				
	DS				

Multidimensional - Calculate Budget Factors



Ref.	Line label	Formula	Post
A	Passes filter?	Passes Filter(Resource = Union, Non-Union)	☐
B	if	A:[Passes filter?] = 1	☐
C	Dollars	Row Value()	☐
D	Last actuals period	Last Actual Period(-- For Scenario --)	☐
E	Current period	Current Period()	☐
F	if	E:[Current period] <= D:[Last actuals period]	☐
G	Actual dollars	Query Data(Actuals,Supplying Center,Project,Resource Category,Receiving Center,Account,S...	☐
H	Actual hours	Query Data(Actuals,Supplying Center,Project,Resource Category,Receiving Center,Account,S...	☐
I	Labor rate - actuals (derived)	G:[Actual dollars] / H:[Actual hours]	☐
J	else		☐
K	Labor rate - forecast	Query Data(Labor - Summary Results,Supplying Center,Resource Category,Budgetable Rate)	☐
L	end if	F:[if]	☐
M	Labor rate	I:[Labor rate - actuals (derived)] + K:[Labor rate - forecast]	☐
N	Payroll tax overhead	Query Data(Overheads - Global Rates,PTAX: Payroll Taxes)	☐
O	Benefits overhead	Query Data(Overheads - Global Rates,Benefits Loading)	☐
P	Payroll taxes	N:[Payroll tax overhead]	☐
Q	Benefits	O:[Benefits overhead]	☐
R	Hours per dollar	1 / M:[Labor rate]	☑
S	end if	B:[if]	☐

The Calculation Editor is laid out in a grid, with lines for logic and columns for labels, formulas and line properties. Users enter formulas and functions line by line to build out the business logic in a simple, logical way. The Calculation Editor uses one line for each formula, rather than building compound formulas as in Excel. This provides much more transparency for the resulting logic, as the line by line results are displayed and the user does not need to decode a compound function. The Calculation Editor uses spreadsheet-like formulas utilizing a) standard mathematical formulas, b) UIPlanner's numerous built-in functions, or c) logical testing capability. Navigation within the Calculation Editor includes command buttons, right-click options, and short-cut keys.

A key feature of the Calculation Editor is that it is where the user defines postings for specific lines in the calculation. Post-ings have two different connotations depending upon the implementation.

- Financial Model – in the Financial Model, postings allow the user to specify that a given line is posted to the Planning Ledger. The user needs to define the appropriate debit and credit, and intercompany treatment if needed.
- Multidimensional – in Multidimensional calculations, postings are where the user can specify that the results of a given line are copied into a dataset, thus building up a result set from the given calculation.

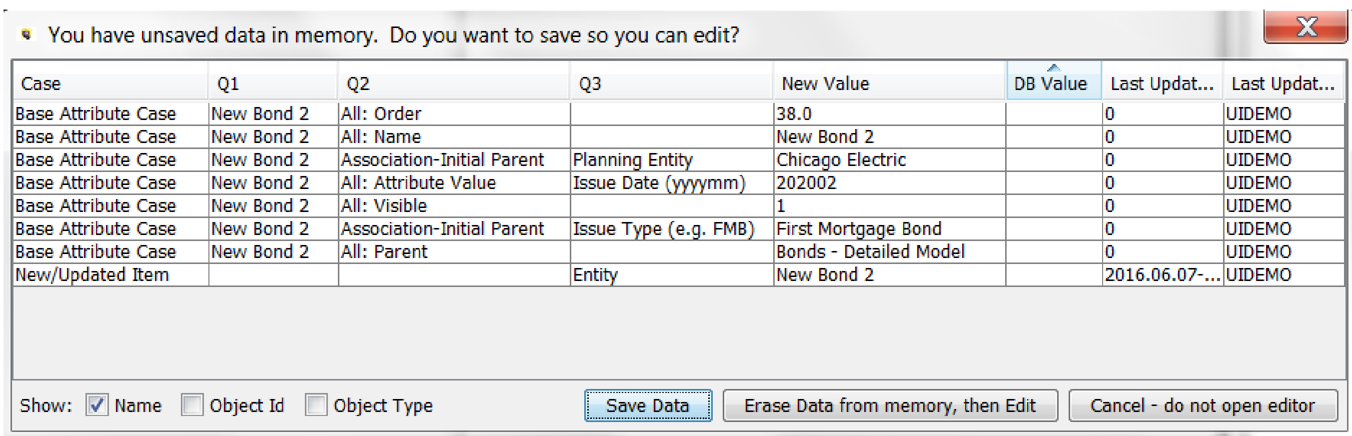
Opening the Calculation Editor

The Edit Calculations screen is accessible from the Edit Calculations Menu Item, as well as from various screens throughout UIPlanner. Below are several examples.

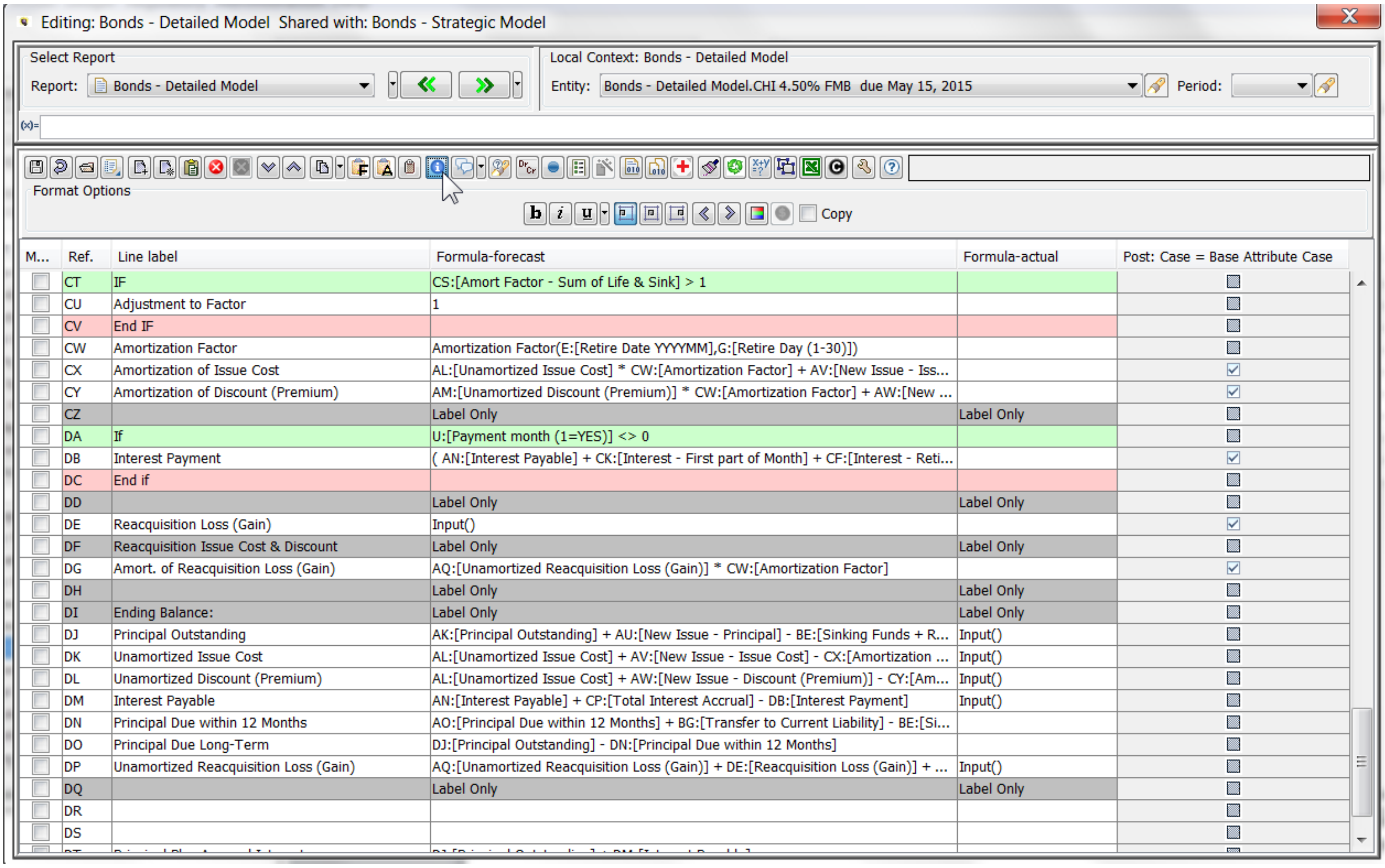
- Run Sequences – right click option on a report in the sequence set.
- Browse Reports – right click on a report in the Report Tree.
- Group Reports – right click on a report or use the Edit Calculations button.
- Administer Multidimensional Calculations – right click on an instruction set or on a dataset.
- Administer Customer Revenue – right click on an instruction set or on a dataset.

The Edit calculations screen is a 'modal' screen, which means that while it is open, the user is limited to that screen in UIPlanner; they cannot use any other screens until it is closed.

Note the system enforces a rule that the user cannot have any unsaved changes when opening the Calculation Editor. This is to prevent a situation where the user made a configuration change (and did not hit save), and then opened the Calculation Editor and made changes there using the old (pre-save configuration). When the user did hit save, the two could be in conflict. To prevent this, when opening the Calculation Editor, the system will bring up the Pending Attribute Saves dialog, prompting the user to save all unsaved changes.



Screen Layout

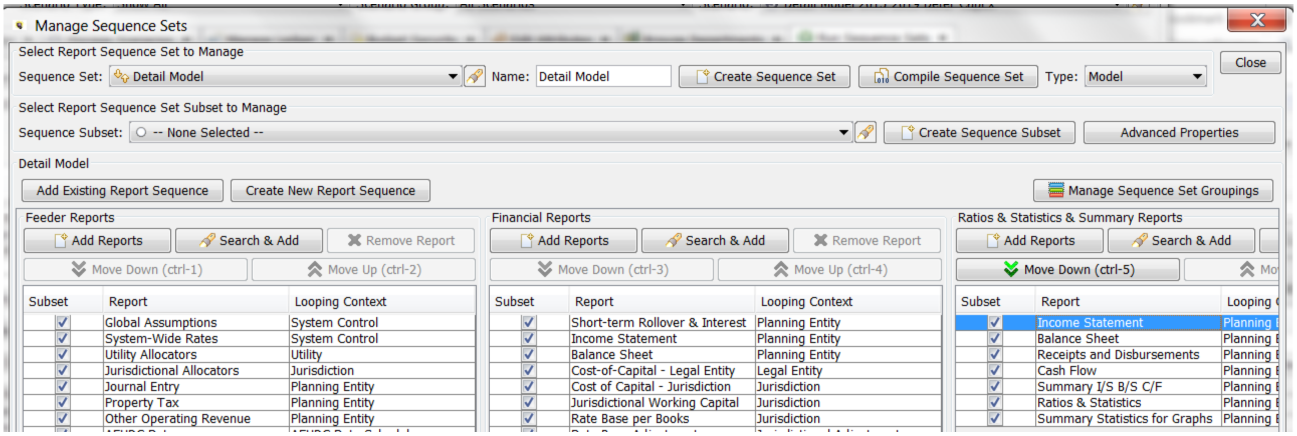


The top of the Calculation Editor identifies what calculation is being edited. The rest of the screen is divided into two or three regions, depending upon the calculation type:

- The top region is only relevant for Financial Model calculations. It contains a dropdown box to select calculations to edit, and includes << and >> buttons to jump to previously edited calculations. It also includes options for selecting the Local Context, which shows results for a given entity and year/month. See Report Panel.
- The center region contains a series of control buttons used for configuring calculations. These are used for line editing, line formatting, and report-level actions. It also has a text box that displays the full text of the formula on the selected line. See Control Button Panel.
- The bottom region is the Calculation Grid. This section contains the actual logic for the selected report. The logic is laid out in lines, with columns for the label and for the formulas to apply. The user can customize the columns in the grid to display additional columns. See Calculation Grid.

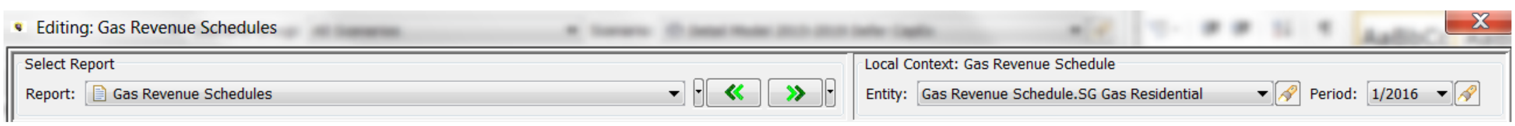
Users can open the Calculation Editor in View mode (either by choice or as restricted by security) . In this case, a number of the buttons and options are disabled. See View Mode.

Note that the specific layout in each section may differ depending upon the kind of sequence that the report is in, as set in Manage Sequence Sets. See below.



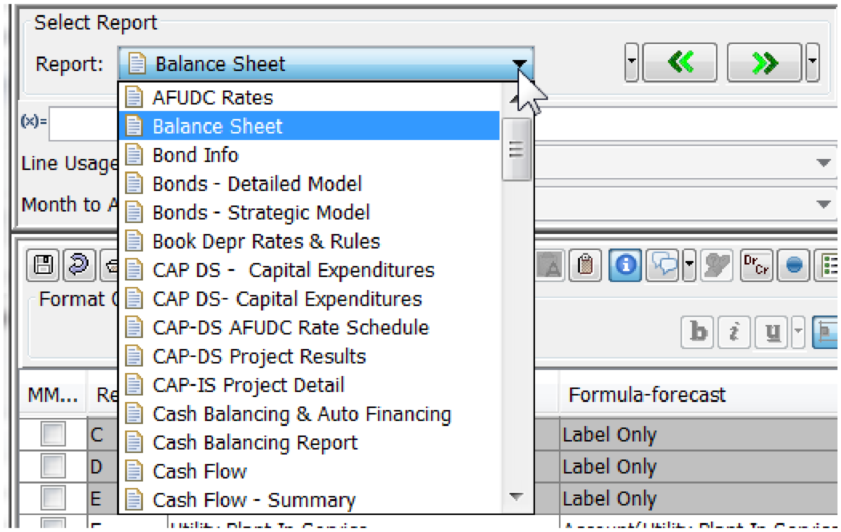
Differences are explained in the appropriate sections.

Report Panel



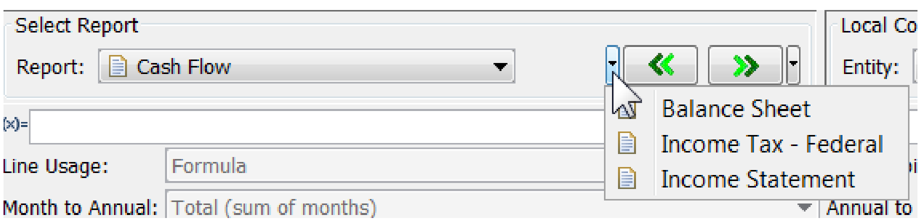
The Report Panel region is only visible in Financial Model calculations. Below are the controls on the Report Panel.

The drop down list identifies the current report. The user can use it to select another report to view or edit. Note that using the Alpha sort order for Reports under view options will make it easier to find a report.

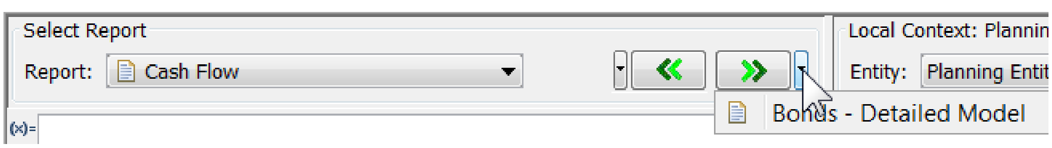


To the right of the drop down list are controls that allow the user to select from reports edited or viewed during the user's current session, in the order that they were opened. The << arrow opens the previous report in the list, and the >> opens the next one. Next to each button are small drop-down arrows that list all reports either earlier in the list or later. Select the report to edit, and the Calculation Editor will open that report. See below.

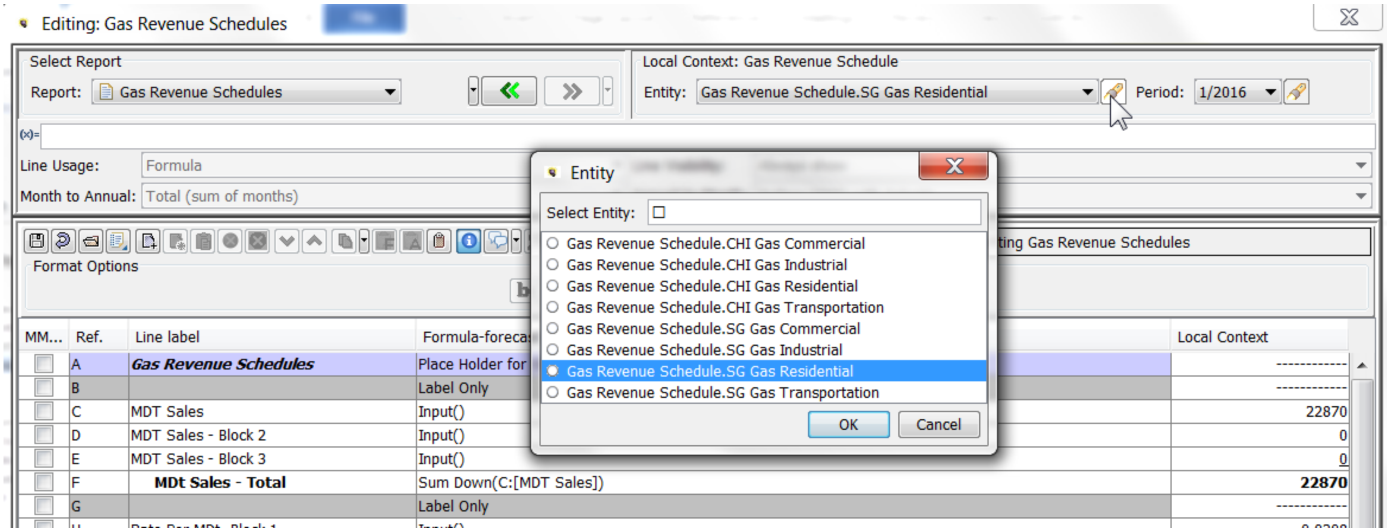
Previous Report(s) in the list.



Next Report(s) in the list



The Local Context section of the Report Panel is where the user can select an entity and month/year to display the report results for (if the sequence has been run). The two dropdown lists include the searchlight to facilitate easer selection. For further information, see Local Context below under Calculation Grid.

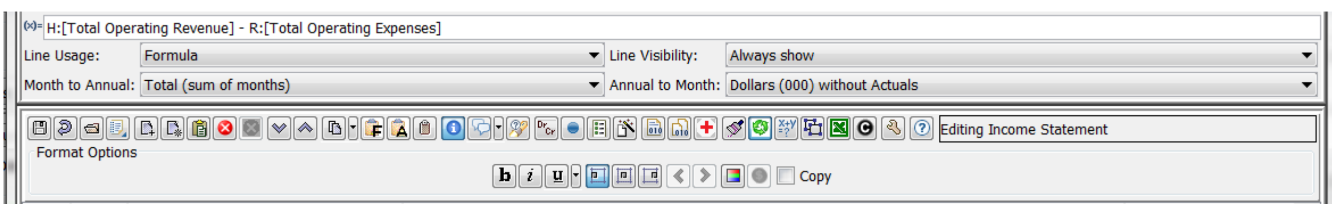


Control Button Panel

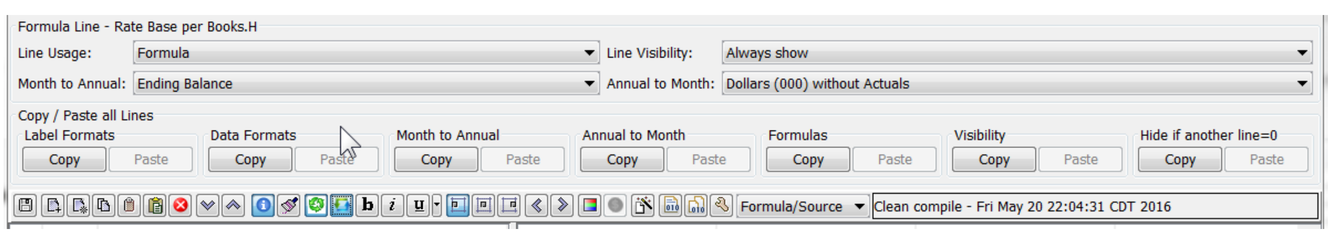
Across the middle of the Calculation Editor are a series of control buttons and dropdowns. These perform key actions used by users in building reports/instruction sets. If the user has opened the Calculation Editor in view mode (either by choice or as limited by security), most of the action buttons are grayed out. See Security and Visibility for more information.

Note that the available buttons differ by calculation type:.

Financial Model reports



Financial Model – Wide Reports

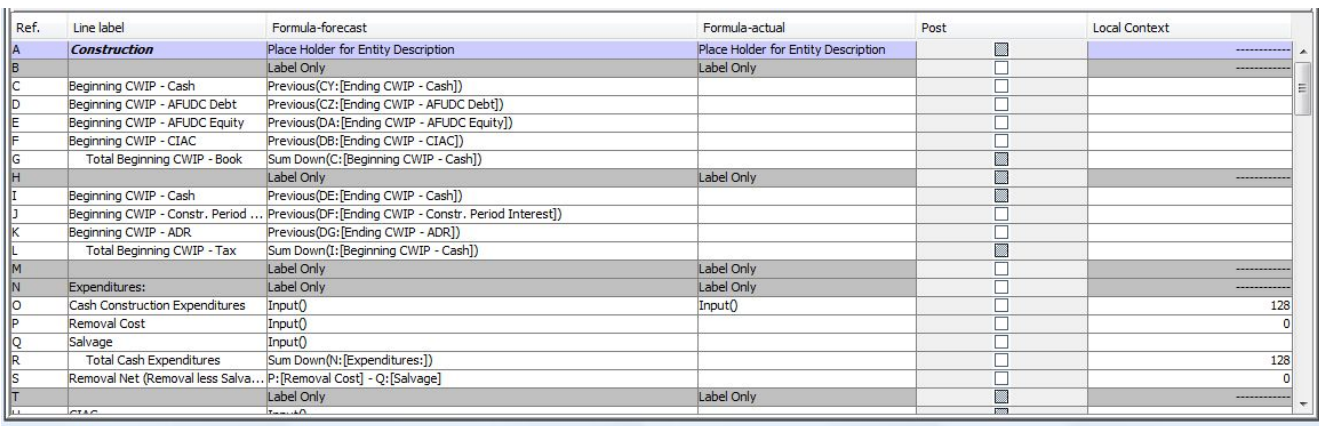


Multidimensional Calculations

Note that most of these buttons have an accompanying Hotkey action. Hover over the button to see a tooltip that identifies the hotkey.

The control buttons are generally divided into two types. Report action buttons are those that invoke an action common to the entire report being viewed. Line action buttons are those that pertain only to the selected line (or lines). The tables below show the button icon and give brief description of each button, along with the hotkey (if applicable). Following the table are sections giving additional details on each control button.

Calculation Grid



Ref.	Line label	Formula-forecast	Formula-actual	Post	Local Context
A	***Construction***	Place Holder for Entity Description	Place Holder for Entity Description		------------
B		Label Only	Label Only		------------
C	Beginning CWIP - Cash	Previous(CY:[Ending CWIP - Cash])			
D	Beginning CWIP - AFUDC Debt	Previous(CZ:[Ending CWIP - AFUDC Debt])			
E	Beginning CWIP - AFUDC Equity	Previous(DA:[Ending CWIP - AFUDC Equity])			
F	Beginning CWIP - CIAC	Previous(DB:[Ending CWIP - CIAC])			
G	Total Beginning CWIP - Book	Sum Down(C:[Beginning CWIP - Cash])			
H		Label Only	Label Only		------------
I	Beginning CWIP - Cash	Previous(DE:[Ending CWIP - Cash])			
J	Beginning CWIP - Constr. Period ...	Previous(DF:[Ending CWIP - Constr. Period Interest])			
K	Beginning CWIP - ADR	Previous(DG:[Ending CWIP - ADR])			
L	Total Beginning CWIP - Tax	Sum Down(I:[Beginning CWIP - Cash])			
M		Label Only	Label Only		------------
N	Expenditures:	Label Only	Label Only		------------
O	Cash Construction Expenditures	Input()	Input()		128
P	Removal Cost	Input()			0
Q	Salvage	Input()			
R	Total Cash Expenditures	Sum Down(N:[Expenditures:])			128
S	Removal Net (Removal less Salva...	P:[Removal Cost] - Q:[Salvage]			0
T		Label Only	Label Only		------------

The Calculation Editor is laid out in a grid, with lines for logic and columns for labels, formulas and line properties. Users enter formulas and functions line by line to build out the business logic in a simple, logical way. The Calculation Editor uses spreadsheet-like formulas utilizing a) standard mathematical operators, b) UIPlanner's numerous built-in functions, or c) logical testing capability. Users build out calculations with a toolset that can be invoked by command buttons, short-cut keys or right-click options.

Users can define which columns to display in the grid using the Select Columns to Display command button. Users will typically display the following columns at a minimum.

- Ref
- Line Label
- Formula-forecast
- Formula-actual (Financial Model)
- Post

Users can also add other columns to the Calculation Grid for display or editing line settings.

The Formula-forecast and Formula-actual columns are the core of the Calculation Grid. They allow UIPlanner to process logic differently depending upon whether the period being processed is actual or forecast. The functionality in these columns is powerful in that it incorporates the use of mathematical operators, conditional statements, and numerous UIPlanner functions.

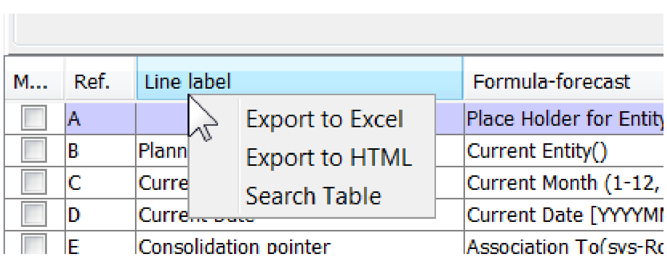
The Calculation Editor toolset includes a large number of actions to facilitate the build-out of reports in the Calculation Grid. These can be sub-divided as:

- Report Actions – tasks related to the entire report
- Line Actions – tasks related to one or more lines in the reports
- Line Format Actions – tasks related to formatting report lines individually or in blocks
- Report Lines Actions – tasks that apply to ALL lines in the report

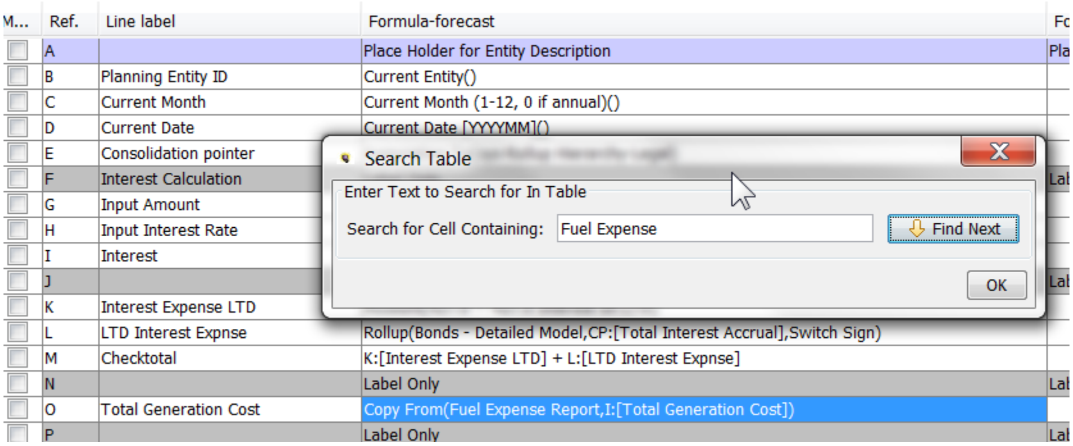
These actions, which are discussed in detail in separate sections, are accomplished in several different ways, via control buttons in the middle region of the Calculation Editor, right-clicks and short-cut keys.

Note that if a report/calculation has been opened in View mode, many of the buttons and options are disabled.

The Calculation Grid includes the standard right click options on the header line.



The search option can be useful, as it can search text within formulas.

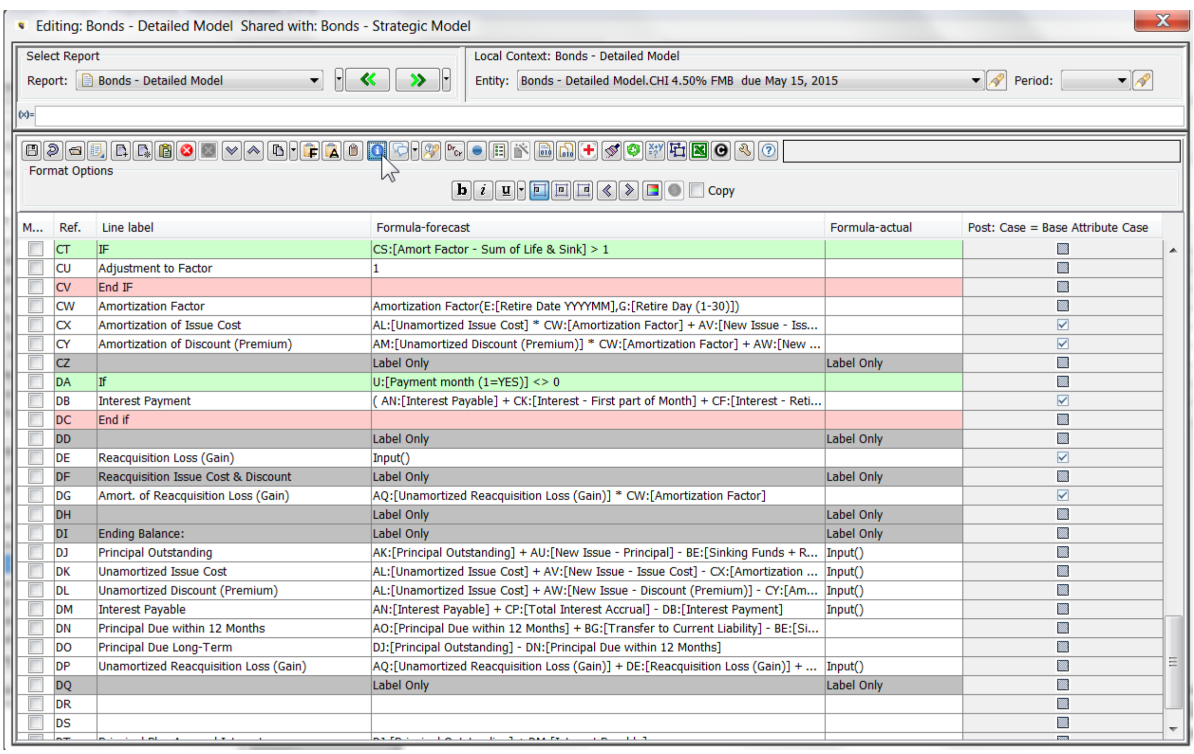


M...	Ref.	Line label	Formula-forecast	Fc
	A		Place Holder for Entity Description	Pla
	B	Planning Entity ID	Current Entity()	
	C	Current Month	Current Month (1-12, 0 if annual)()	
	D	Current Date	Current Date [YYYYMM]()	
	E	Consolidation pointer		
	F	Interest Calculation		Lal
	G	Input Amount		
	H	Input Interest Rate		
	I	Interest		
	J			Lal
	K	Interest Expense LTD		
	L	LTD Interest Expnse	Rollup(Bonds - Detailed Model,CP:[Total Interest Accrual],Switch Sign)	
	M	Checktotal	K:[Interest Expense LTD] + L:[LTD Interest Expnse]	
	N		Label Only	Lal
	O	Total Generation Cost	Copy From(Fuel Expense Report,I:[Total Generation Cost])	
	P		Label Only	Lal

Calculation Editor Formulas

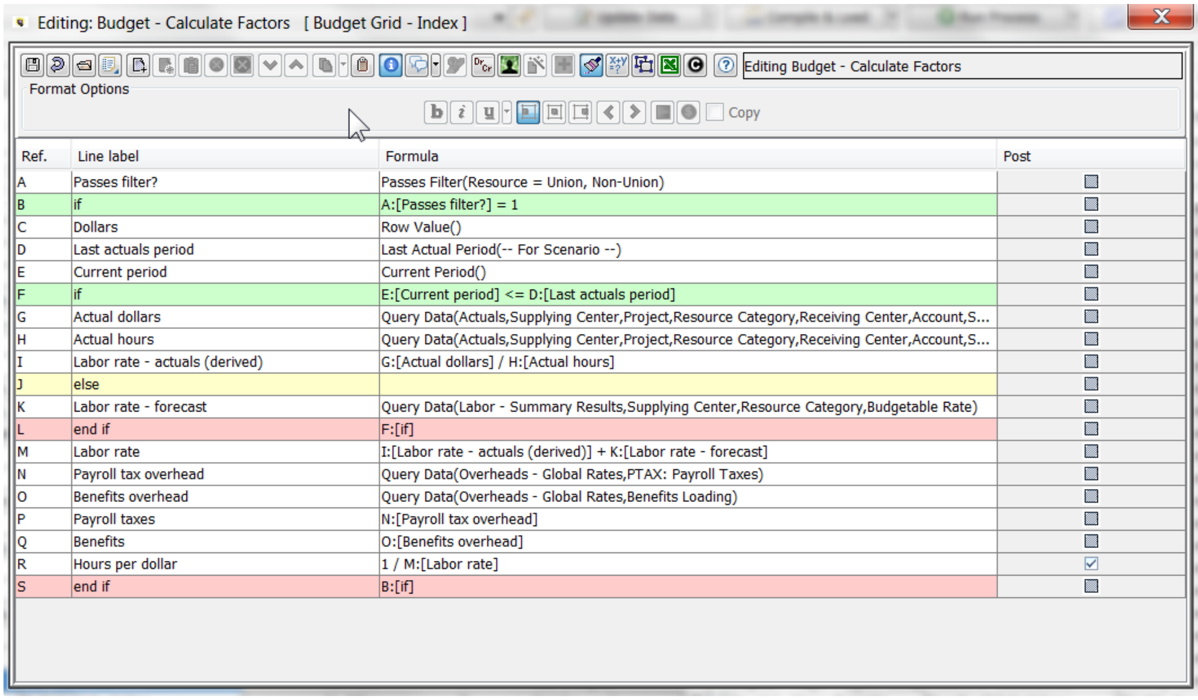
Users build out the business logic for reports or calculations by entering formulas or functions on lines in the calculation grid. The Calculation Editor uses one line for each formula, rather than building compound formulas as in Excel. This provides much more transparency for the resulting logic, as the line by line results are displayed and the user does not need to decode a compound function. Below are two examples:

Financial Model – Bond Calculation



M...	Ref.	Line label	Formula-forecast	Formula-actual	Post: Case = Base Attribute Case
	CT	IF	CS:[Amort Factor - Sum of Life & Sink] > 1		
	CU	Adjustment to Factor	1		
	CV	End IF			
	CW	Amortization Factor	Amortization Factor(E:[Retire Date YYYYMM],G:[Retire Day (1-30)])		
	CX	Amortization of Issue Cost	AL:[Unamortized Issue Cost] * CW:[Amortization Factor] + AV:[New Issue - Iss...		☑
	CY	Amortization of Discount (Premium)	AM:[Unamortized Discount (Premium)] * CW:[Amortization Factor] + AW:[New ...		☑
	CZ		Label Only	Label Only	
	DA	If	U:[Payment month (1=YES)] <> 0		
	DB	Interest Payment	(AN:[Interest Payable] + CK:[Interest - First part of Month] + CF:[Interest - Reti...		☑
	DC	End if			
	DD		Label Only	Label Only	
	DE	Reacquisition Loss (Gain)	Input()		☑
	DF	Reacquisition Issue Cost & Discount	Label Only	Label Only	
	DG	Amort. of Reacquisition Loss (Gain)	AQ:[Unamortized Reacquisition Loss (Gain)] * CW:[Amortization Factor]		☑
	DH		Label Only	Label Only	
	DI	Ending Balance:	Label Only	Label Only	
	DJ	Principal Outstanding	AK:[Principal Outstanding] + AU:[New Issue - Principal] - BE:[Sinking Funds + R...	Input()	
	DK	Unamortized Issue Cost	AL:[Unamortized Issue Cost] + AV:[New Issue - Issue Cost] - CX:[Amortization ...	Input()	
	DL	Unamortized Discount (Premium)	AL:[Unamortized Issue Cost] + AW:[New Issue - Discount (Premium)] - CY:[Am...	Input()	
	DM	Interest Payable	AN:[Interest Payable] + CP:[Total Interest Accrual] - DB:[Interest Payment]	Input()	
	DN	Principal Due within 12 Months	AO:[Principal Due within 12 Months] + BG:[Transfer to Current Liability] - BE:[Si...		
	DO	Principal Due Long-Term	DJ:[Principal Outstanding] - DN:[Principal Due within 12 Months]		
	DP	Unamortized Reacquisition Loss (Gain)	AQ:[Unamortized Reacquisition Loss (Gain)] + DE:[Reacquisition Loss (Gain)] + ...	Input()	
	DQ		Label Only	Label Only	
	DR				
	DS				

Multidimensional - Calculate Budget Factors

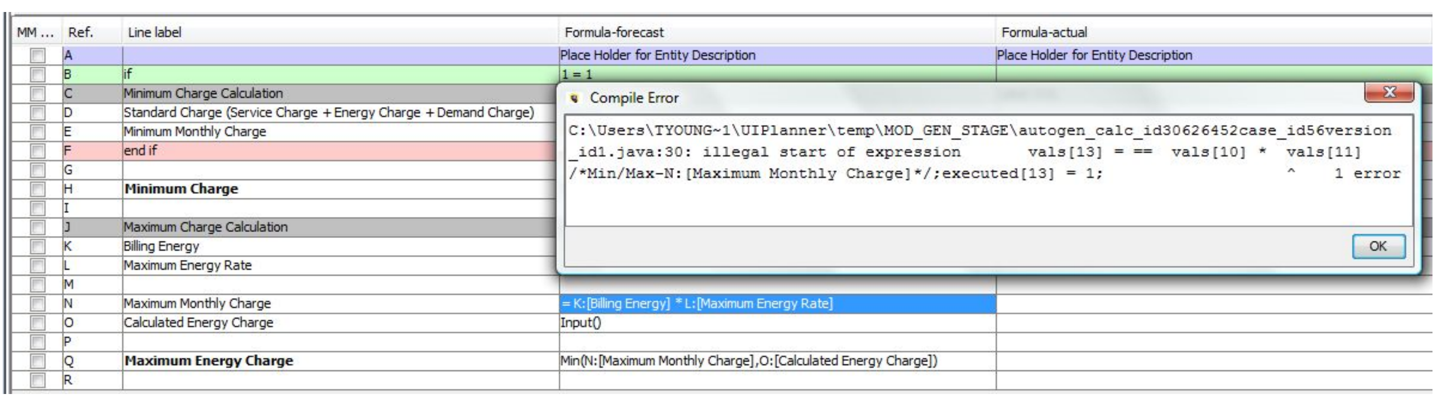


Ref.	Line label	Formula	Post
A	Passes filter?	Passes Filter(Resource = Union, Non-Union)	
B	if	A:[Passes filter?] = 1	
C	Dollars	Row Value()	
D	Last actuals period	Last Actual Period(-- For Scenario --)	
E	Current period	Current Period()	
F	if	E:[Current period] <= D:[Last actuals period]	
G	Actual dollars	Query Data(Actuals,Supplying Center,Project,Resource Category,Receiving Center,Account,S...	
H	Actual hours	Query Data(Actuals,Supplying Center,Project,Resource Category,Receiving Center,Account,S...	
I	Labor rate - actuals (derived)	G:[Actual dollars] / H:[Actual hours]	
J	else		
K	Labor rate - forecast	Query Data(Labor - Summary Results,Supplying Center,Resource Category,Budgetable Rate)	
L	end if	F:[if]	
M	Labor rate	I:[Labor rate - actuals (derived)] + K:[Labor rate - forecast]	
N	Payroll tax overhead	Query Data(Overheads - Global Rates,PTAX: Payroll Taxes)	
O	Benefits overhead	Query Data(Overheads - Global Rates,Benefits Loading)	
P	Payroll taxes	N:[Payroll tax overhead]	
Q	Benefits	O:[Benefits overhead]	
R	Hours per dollar	1 / M:[Labor rate]	✓
S	end if	B:[if]	

Line Syntax

To enter formulas or functions in the grid, users can enter functions by highlighting the formula cell and launching the Function Editor. To enter line references or mathematical operators, double click in the cell or just start typing. To reference another line, just type its Line Ref from the left column. Note that the formulas in the Calculation Editor are not prefaced with "=" like in Excel (in UIPLanner, "=" opens the Function Editor).

If a user does accidentally prefix a formula with an "=" sign, this will trigger the following compile error when the user tries to compile and save the report. Note the reference to the line with the error and the text (illegal start of expression).

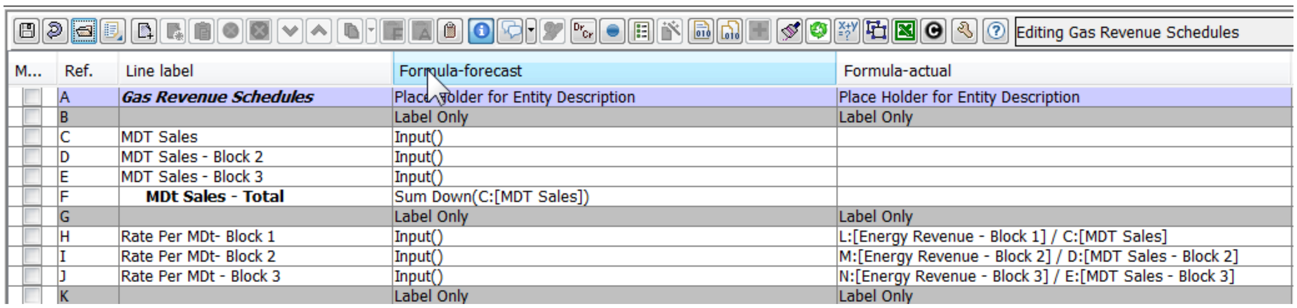


MM ...	Ref.	Line label	Formula-forecast	Formula-actual
	A		Place Holder for Entity Description	Place Holder for Entity Description
	B	if	1 = 1	
	C	Minimum Charge Calculation		
	D	Standard Charge (Service Charge + Energy Charge + Demand Charge)		
	E	Minimum Monthly Charge		
	F	end if		
	G			
	H	**Minimum Charge**		
	I			
	J	Maximum Charge Calculation		
	K	Billing Energy		
	L	Maximum Energy Rate		
	M			
	N	Maximum Monthly Charge	= K:[Billing Energy] * L:[Maximum Energy Rate]	
	O	Calculated Energy Charge	Input()	
	P			
	Q	**Maximum Energy Charge**	Min(N:[Maximum Monthly Charge],O:[Calculated Energy Charge])	
	R			

Note that the Financial Model gives the compile error immediately, while the multidimensional calculations produce it when the related rule set is run.

Formula-Actual

The Formula-actual column allows the user to enter an override formula for the calculation to use when processing Actuals periods. Actuals periods are as defined by the Scenario Actuals date, or the report-specific actuals date defined in Group Reports. In processing the report logic, the calculation engine will use the formula as defined in the Formula-forecast column, unless overridden by the Formula-actuals column. Below is an example.



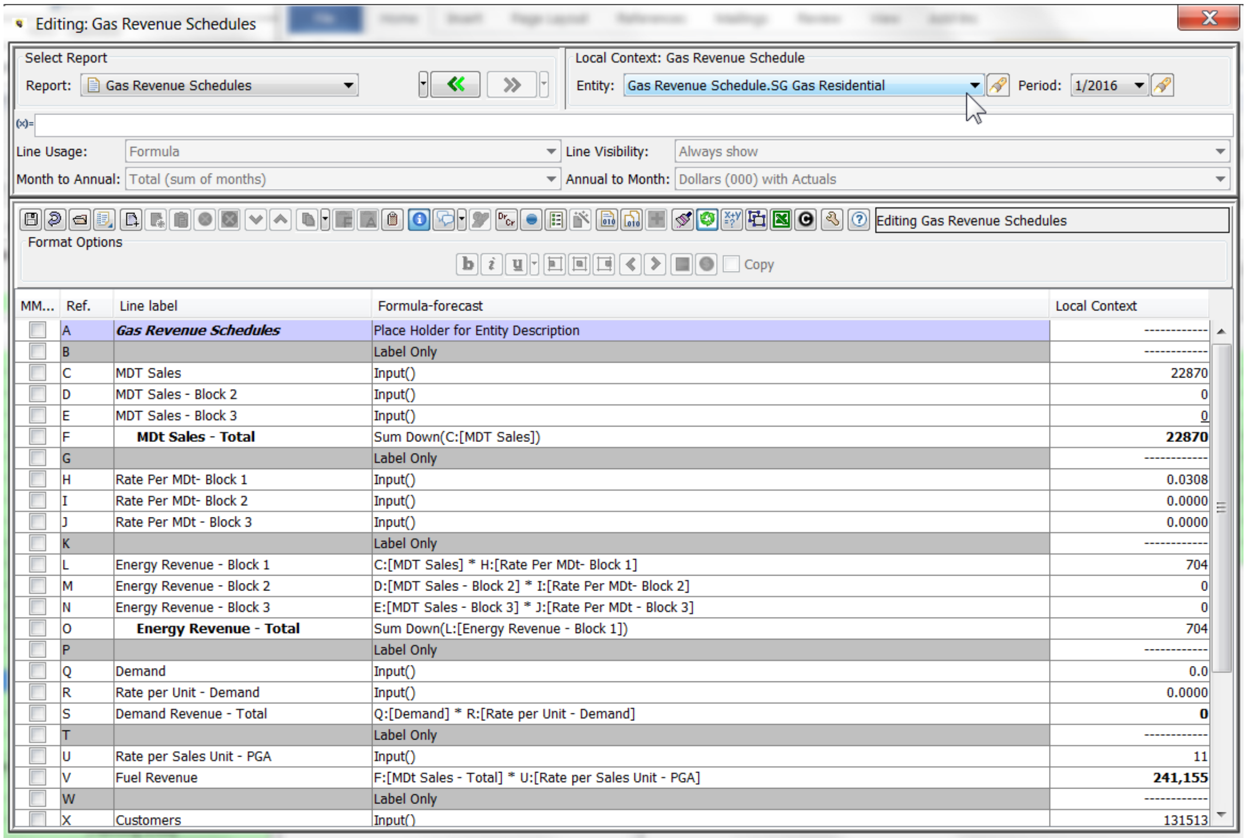
Editing Gas Revenue Schedules

M...	Ref.	Line label	Formula-forecast	Formula-actual
	A	***Gas Revenue Schedules***	Place Holder for Entity Description	Place Holder for Entity Description
	B		Label Only	Label Only
	C	MDT Sales	Input()	
	D	MDT Sales - Block 2	Input()	
	E	MDT Sales - Block 3	Input()	
	F	**MDt Sales - Total**	Sum Down(C:[MDT Sales])	
	G		Label Only	Label Only
	H	Rate Per MDt- Block 1	Input()	L:[Energy Revenue - Block 1] / C:[MDT Sales]
	I	Rate Per MDt- Block 2	Input()	M:[Energy Revenue - Block 2] / D:[MDT Sales - Block 2]
	J	Rate Per MDt - Block 3	Input()	N:[Energy Revenue - Block 3] / E:[MDT Sales - Block 3]
	K		Label Only	Label Only

To have a line not calculated in the Actuals periods, enter a zero in the Formula-actual column.

Local Context

If the user has enabled the Local Context column, it will display the results of the calculation for the selected entity and month/year selected in the Report Panel. The user can use the drop downs to choose entities and/or month and year to see the results change appropriately. This can be very helpful when building a complex calculation/report, as it shows the results calculations alongside the formula.



MM...	Ref.	Line label	Formula-forecast	Local Context
	A	***Gas Revenue Schedules***	Place Holder for Entity Description	------------
	B		Label Only	------------
	C	MDT Sales	Input()	22870
	D	MDT Sales - Block 2	Input()	0
	E	MDT Sales - Block 3	Input()	0
	F	**MDt Sales - Total**	Sum Down(C:[MDT Sales])	**22870**
	G		Label Only	------------
	H	Rate Per MDt- Block 1	Input()	0.0308
	I	Rate Per MDt- Block 2	Input()	0.0000
	J	Rate Per MDt - Block 3	Input()	0.0000
	K		Label Only	------------
	L	Energy Revenue - Block 1	C:[MDT Sales] * H:[Rate Per MDt- Block 1]	704
	M	Energy Revenue - Block 2	D:[MDT Sales - Block 2] * I:[Rate Per MDt- Block 2]	0
	N	Energy Revenue - Block 3	E:[MDT Sales - Block 3] * J:[Rate Per MDt - Block 3]	0
	O	**Energy Revenue - Total**	Sum Down(L:[Energy Revenue - Block 1])	704
	P		Label Only	------------
	Q	Demand	Input()	0.0
	R	Rate per Unit - Demand	Input()	0.0000
	S	Demand Revenue - Total	Q:[Demand] * R:[Rate per Unit - Demand]	**0**
	T		Label Only	------------
	U	Rate per Sales Unit - PGA	Input()	11
	V	Fuel Revenue	F:[MDt Sales - Total] * U:[Rate per Sales Unit - PGA]	**241,155**
	W		Label Only	------------
	X	Customers	Input()	131513

Notes:

- Local Context is only available in Financial Model reports. It is not available in Wide calculation view and it is not available in 2D model reports
- Amounts will only be displayed if the report being edited has been run
- If the user changes the report, the amounts in the Local Context column are not dynamically updated. The sequence must be rerun in order to see the updated results. If a user adds or deletes lines, the amounts move with their original lines

Report Actions

In building calculations in the Calculation Editor, the toolset includes a number of tools that apply to the entire report being edited or viewed. Those that are not related to changes in report lines are enabled in View mode as well. See View Mode.

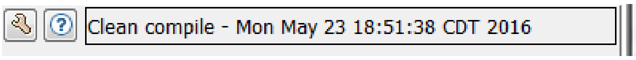
The table below lays out the Control Buttons and shortcut keys for the Report Actions. Following the table are detailed descriptions of each of the Report Actions.

Icon	Action	Description	Shortcut key
	Save	Saves the current report. In Financial Model, also compiles.	CTRL-S
	Undo All	Undo all changes made since the last save.	CTRL-Z
	Open Calculation	Opens the Select Report dialog box.	CTRL-O
	Export to HTML	Exports and opens an HTML file displaying the active report.	CTRL-E
	Show full line name	Toggles the line reference letter in all formulas to include/exclude the Line Name. Also controls the display of report line references in the Function Editor dialog box.	CTRL-N
	Make formula lines with empty formulas labels	Takes all empty formula lines and changes them to labels. The down arrow to the right makes a specific line a comment (Ctrl-/) or line label (Ctrl-'). See Line actions	CTRL-L
	Limit Entities to Run	Opens the ***SELECT ENTITIES NOT TO RUN*** dialog box.	
	Edit Time Data	Opens the ***EDIT TIME DATA*** screen.	CTRL-T
	Compile	Compiles the currently active report	
	Compile All	Compiles all reports listed on the ***RUN SEQUENCES*** screen.	
	Recover Deleted Line(s)	Recovers a deleted line or lines	
	Show/Hide Format Panel	Toggles the display showing or hiding the line format buttons above.	
	Show/Hide Formula Usage	Toggle button to show or hide the *Line Context* area of the screen.	
	Show/Hide Copy All Lines Panel	Toggle button to show or hide the Copy All Lines Panel (Financial Model – Wide Reports only)	
	Show/Hide Long Formulas	Toggle button to show or hide the long formula in the *Line Context* area of the screen.	
	Split Screen	Displays a second Calculation Grid. The current report or a second report can be viewed and edited from this additional grid.	
	Edit Line Settings in Excel	Exports the report labels and formulas to Excel, along with all editable columns displayed in the grid. These can be edited in Excel.	
	Select Columns to Display	Opens the ***SELECT COLUMNS TO DISPLAY*** dialog box.	
	View Generated Source	Displays the Java code generated for the active report.	
	Launch Help	Opens the online UIPlanner ***HELP*** .	

Below are detailed descriptions of each Report Action.

Save

Saves all changes to the current report. For Financial Model calculations, this also does a runtime compile. Successful compile will be indicated in the text box to the right of the Control button panel.

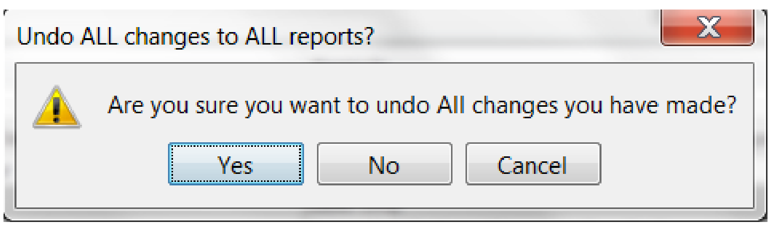


If there are compile errors, they will be listed in a dialog box (see Compile Errors for more information).

For Multidimensional calculations, the Save button only saves – it does not do a full compile. Calculations are compiled when the related sequence is run.

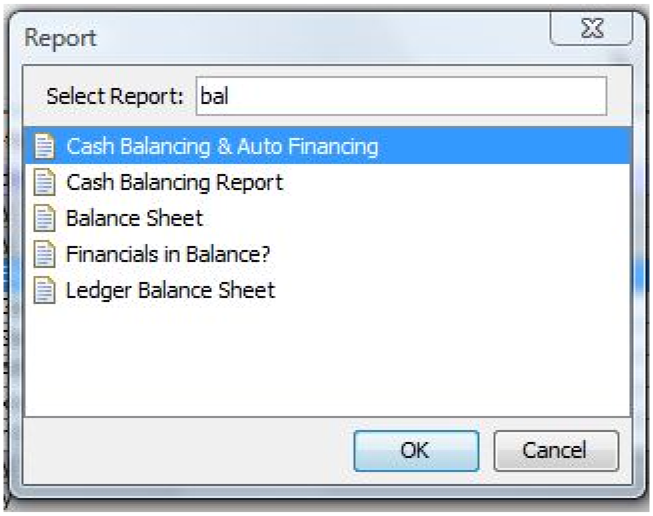
Undo All

Undoes all changes made since the last Save action. Note that this includes all unsaved changes to all reports. The user will first be presented with a confirmation dialog.



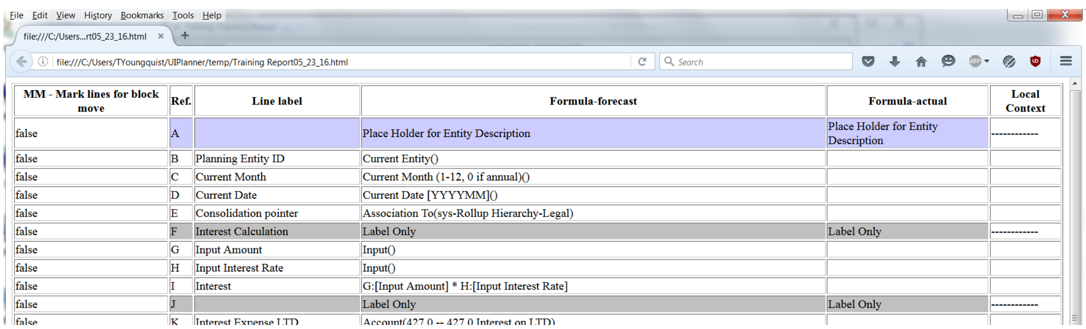
Open Calculation

Allows the user to select a different report to edit or view. This opens the Select Report dialog box which consists of a drop-down list of all reports. Note that this dialog box has text search. See the example below where “bal” is entered.



Export to HTML

Exports the current report to an HTML file with the current column selections.



MM - Mark lines for block move	Ref.	Line label	Formula-forecast	Formula-actual	Local Context
false	A		Place Holder for Entity Description	Place Holder for Entity Description	------------
false	B	Planning Entity ID	Current Entity()		
false	C	Current Month	Current Month (1-12, 0 if annual)()		
false	D	Current Date	Current Date [YYYYMM]()		
false	E	Consolidation pointer	Association To(sys-Rollup Hierarchy-Legal)		
false	F	Interest Calculation	Label Only	Label Only	------------
false	G	Input Amount	Input()		
false	H	Input Interest Rate	Input()		
false	I	Interest	G:[Input Amount] * H:[Input Interest Rate]		
false	J		Label Only	Label Only	------------
false	K	Interest Expense LTD	Account(427.0 -- 427.0 Interest on LTD)		

Show Full Line Name

The Show Full Line Name button allows the user to toggle the line name on and off. This can be helpful in analyzing the calculation logic, as it highlights the line references and formulas.

Line Name On

Ref.	Line label	Formula-forecast
AH		Label Only
AI	Beginning Balance:	Label Only
AJ	Principal Outstanding	Previous(DM:[Principal Outstanding])
AK	Unamortized Issue Cost	Previous(DN:[Unamortized Issue Cost])
AL	Unamortized Discount (Premium)	Previous(DO:[Unamortized Discount (Premium)])
AM	Interest Payable	Previous(DP:[Interest Payable])
AN	Principal Due within 12 Months	Previous(DQ:[Principal Due within 12 Months])
AO	Principal Due Long-Term	Previous(DR:[Principal Due Long-Term])
AP	Unamortized Reacquisition Loss (Gain)	Previous(DS:[Unamortized Reacquisition Loss (Gain)])
AQ		Label Only
AR	Current Period Activity:	Label Only
AS	If	C:[Issue Date YYYYMM] = R:[current YYYYMM]
AT	New Issue - Principal	L:[New Issue Principal]
AU	New Issue - Issue Cost	AT:[New Issue - Principal] * M:[New Issue Issue Cost Percent] / 100
AV	New Issue - Discount (Premium)	Label Only
AW	end if	
AX	If	AF:[Is Retire Date] = 1
AY	Retirement	AJ:[Principal Outstanding] * AF:[Is Retire Date]
AZ	else	
BA	Sinking Fund	Input()
BB	End if	

Line Name Off

Ref.	Line label	Formula-forecast
AH		Label Only
AI	Beginning Balance:	Label Only
AJ	Principal Outstanding	Previous(DM:[Principal Outstanding])
AK	Unamortized Issue Cost	Previous(DN:[Unamortized Issue Cost])
AL	Unamortized Discount (Premium)	Previous(DO:[Unamortized Discount (Premium)])
AM	Interest Payable	Previous(DP:[Interest Payable])
AN	Principal Due within 12 Months	Previous(DQ:[Principal Due within 12 Months])
AO	Principal Due Long-Term	Previous(DR:[Principal Due Long-Term])
AP	Unamortized Reacquisition Loss (Gain)	Previous(DS:[Unamortized Reacquisition Loss (Gain)])
AQ		Label Only
AR	Current Period Activity:	Label Only
AS	If	C = R
AT	New Issue - Principal	L
AU	New Issue - Issue Cost	AT * M / 100
AV	New Issue - Discount (Premium)	Label Only
AW	end if	
AX	If	AF = 1
AY	Retirement	AJ * AF
AZ	else	
BA	Sinking Fund	Input()
BB	End if	

Make Formula Lines with Empty Formulas Labels

Takes all empty formula lines and changes them to labels. See below

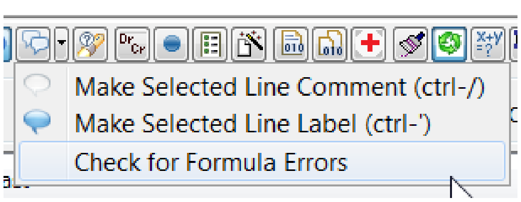
Before

MM...	Ref.	Line label	Formula-forecast	Formula-actual
	A		Place Holder for Entity Description	Place Holder for Entity Descrip...
	B	Planning Entity ID	Current Entity()	
	C	Current Month	Current Month (1-12, 0 if annual)()	
	D	Current Date	Current Date [YYYYMM]()	
	E	Consolidation pointer	Association To(sys-Rollup Hierarchy-Legal)	
	F	Interest Calculation	Label Only	Label Only
	G	Input Amount	Input()	
	H	Input Interest Rate	Input()	
	I	Interest	G:[Input Amount] * H:[Input Interest Rate]	
	J			
	K	Interest Expense LTD	Account(427.0 -- 427.0 Interest on LTD)	
	L	LTD Interest Expnse	Rollup(Bonds - Detailed Model,CP:[Total Interest Accrual],Switch Sign)	
	M	Checktotal	K:[Interest Expense LTD] + L:[LTD Interest Expnse]	
	N			
	O	Total Generation Cost	Copy From(Fuel Expense Report,I:[Total Generation Cost])	
	P			
	Q	if	C:[Current Month] = 3 OR C:[Current Month] = 6 OR C:[Current Month] = 9 OR C:[Curre...	
	R	Three Month Total	Sum Values from Period(K:[Interest Expense LTD],-2)	
	S	end if	Q:[if]	
	T	Annual Interest Total	Annual Total(K:[Interest Expense LTD])	
	U			C:[Current Month]
	V	Beginning Interest Payable	Previous(X:[Ending Interest Payable])	
	W	Interest calc	I:[Interest]	
	X	Ending Interest Payable	V:[Beginning Interest Payable] + W:[Interest calc]	Account(Interest Accrued)
	Y			
	Z	13 Month Average - Interest Pay...	13-point Average of Monthly Averages(X:[Ending Interest Payable])	

After

MM...	Ref.	Line label	Formula-forecast	Formula-actual
	A		Place Holder for Entity Description	Place Holder for Entity Descrip...
	B	Planning Entity ID	Current Entity()	
	C	Current Month	Current Month (1-12, 0 if annual)()	
	D	Current Date	Current Date [YYYYMM]()	
	E	Consolidation pointer	Association To(sys-Rollup Hierarchy-Legal)	
	F	Interest Calculation	Label Only	Label Only
	G	Input Amount	Input()	
	H	Input Interest Rate	Input()	
	I	Interest	G:[Input Amount] * H:[Input Interest Rate]	
	J		Label Only	Label Only
	K	Interest Expense LTD	Account(427.0 -- 427.0 Interest on LTD)	
	L	LTD Interest Expnse	Rollup(Bonds - Detailed Model,CP:[Total Interest Accrual],Switch Sign)	
	M	Checktotal	K:[Interest Expense LTD] + L:[LTD Interest Expnse]	
	N		Label Only	Label Only
	O	Total Generation Cost	Copy From(Fuel Expense Report,I:[Total Generation Cost])	
	P		Label Only	Label Only
	Q	if	C:[Current Month] = 3 OR C:[Current Month] = 6 OR C:[Current Month] = 9 OR C:[Curre...	
	R	Three Month Total	Sum Values from Period(K:[Interest Expense LTD],-2)	
	S	end if	Q:[if]	
	T	Annual Interest Total	Annual Total(K:[Interest Expense LTD])	
	U			C:[Current Month]
	V	Beginning Interest Payable	Previous(X:[Ending Interest Payable])	
	W	Interest calc	I:[Interest]	
	X	Ending Interest Payable	V:[Beginning Interest Payable] + W:[Interest calc]	Account(Interest Accrued)

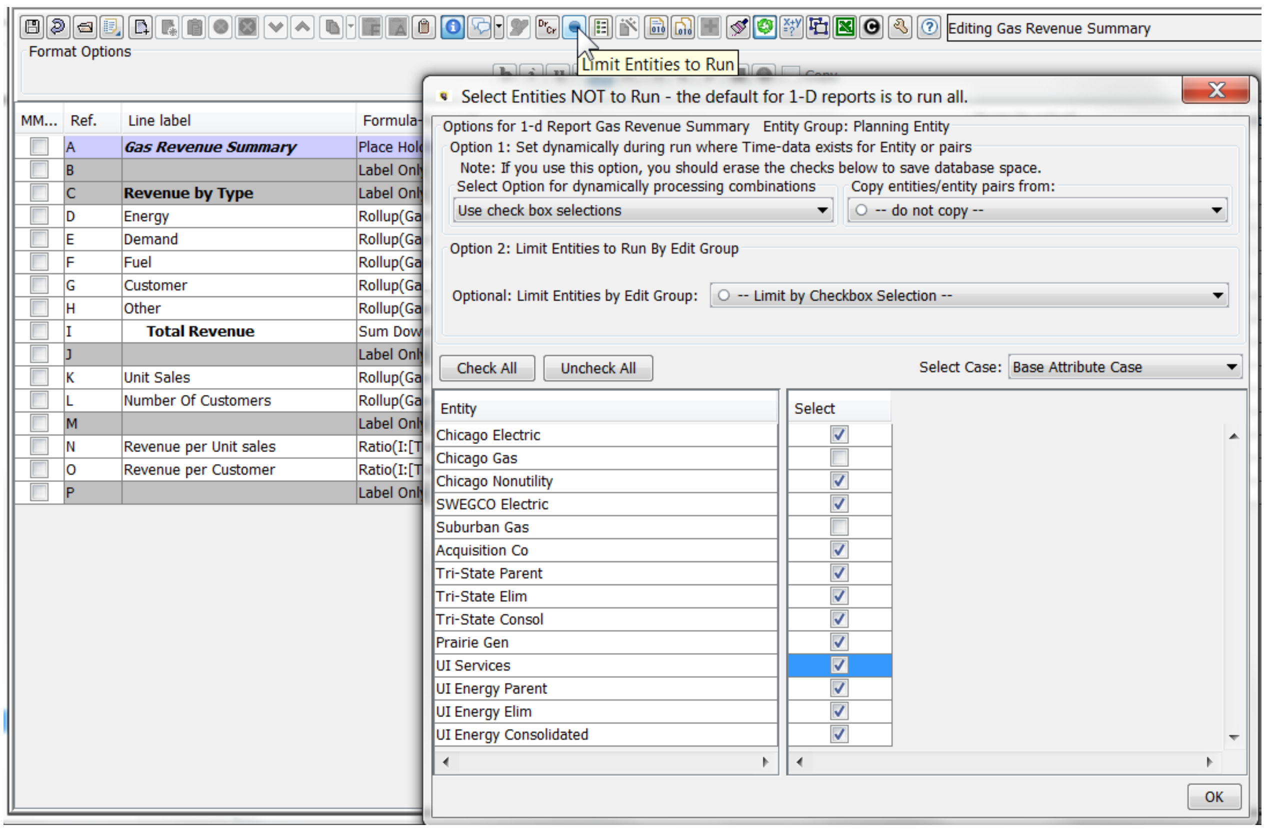
The button has three additional options in the dropdown arrow next to it.



- Make Selected Line Comment – makes the currently selected line a comment (see Line Actions)
- Make Selected Line Label – makes the currently selected line a label (see line Actions)
- Check for Formula Errors - checks the current calculation for errors

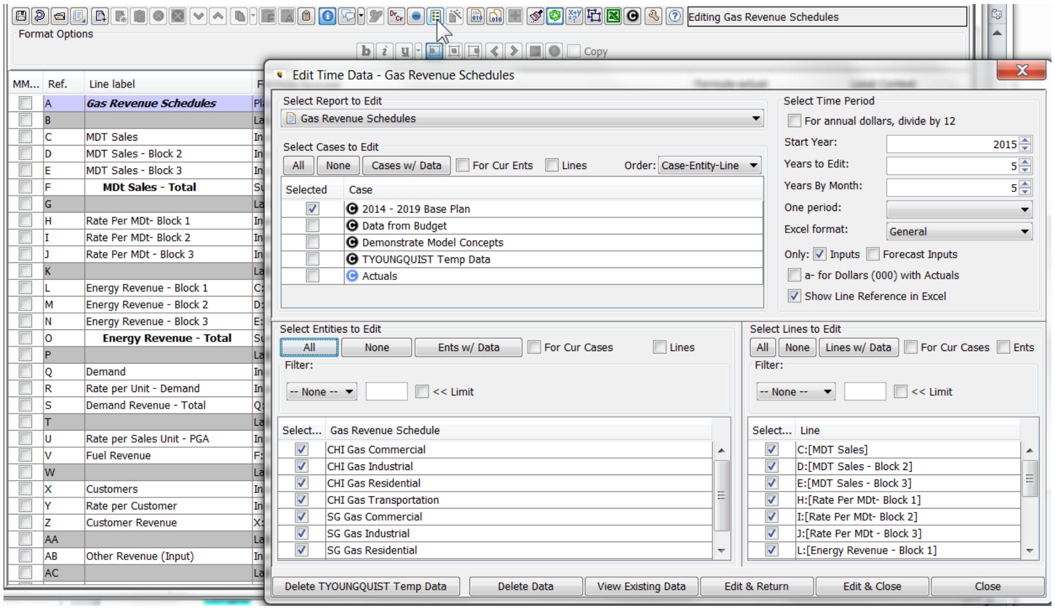
Limit Entities to Run

The Limit Entities to Run button opens a dialog that allows the user to control which entities the selected report (Financial Model only) will run over. See Limit Entities to Run for more information.



Edit Time Data

Opens the Time Data Editor for the selected report. Applicable to Financial Model reports only.



Compile

Compiles the current report and identifies any compile errors. Applicable to Financial Model calculations only.

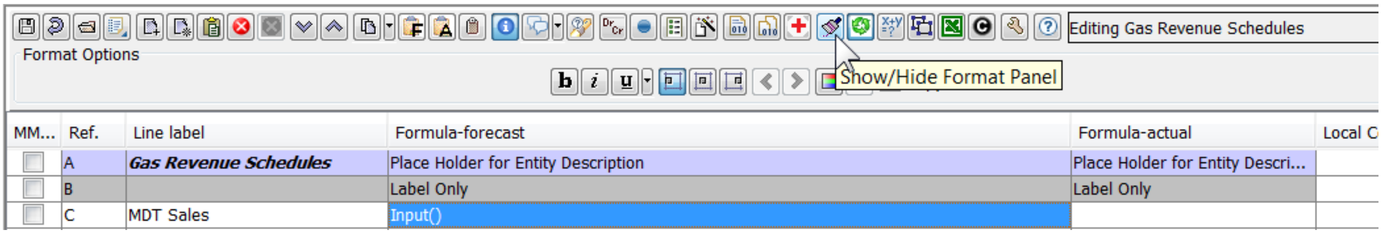
Compile All

Compiles all reports in the currently active report sequence. Applicable to Financial Model sequences only.

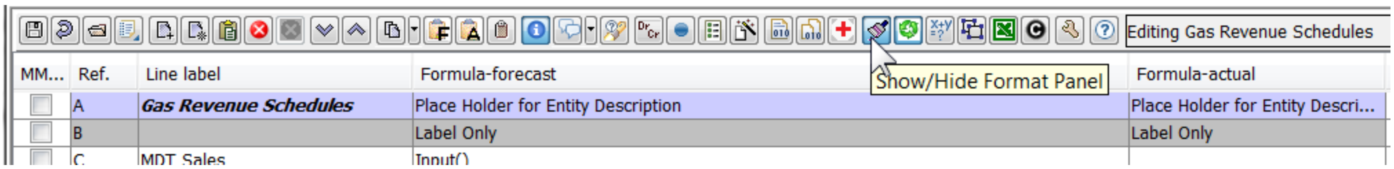
Show/Hide Format Panel

Toggles the Line Format buttons panel on and off. Note that in the Wide Calculation Editor, the format buttons are not in a separate panel, but are in line with the other buttons.

On



Off



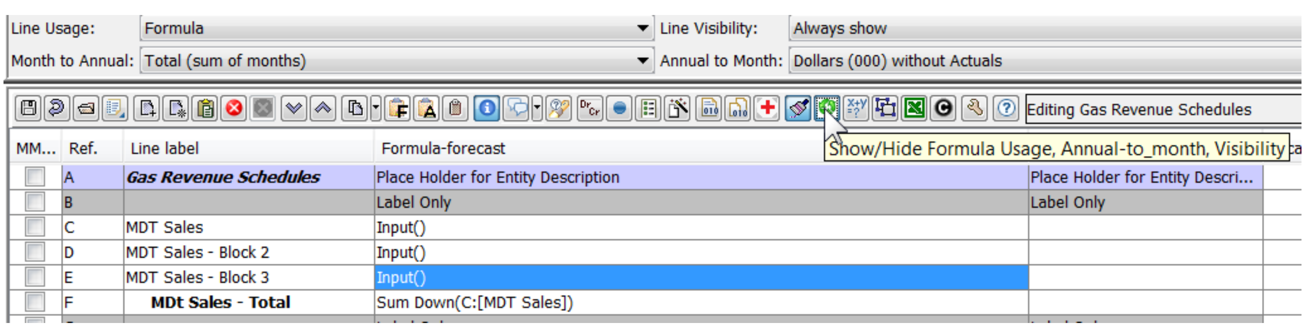
Show/Hide Formula Usage, Annual to Month, Visibility

This button toggles on/off a panel that has dropdowns for displaying or editing four of the key characteristics of lines in calculations.

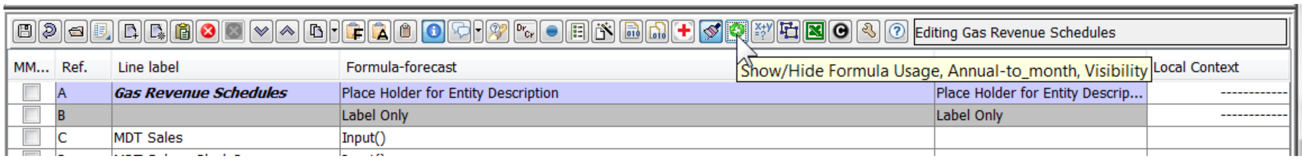
- Line Usage – Formula, Label, Place Holder for Entity Description, etc.
- Line Visibility – Always Show, Always Hide, etc.
- Month to Annual – how the line is displayed when the related report is displayed annually
- Annual to Month – how the values in time data are interpreted by the report.

Note that each of these settings can be displayed as columns in the Calculation Grid. See Line Settings for more information on these settings. This button is applicable to Financial Model reports only.

Line Settings On

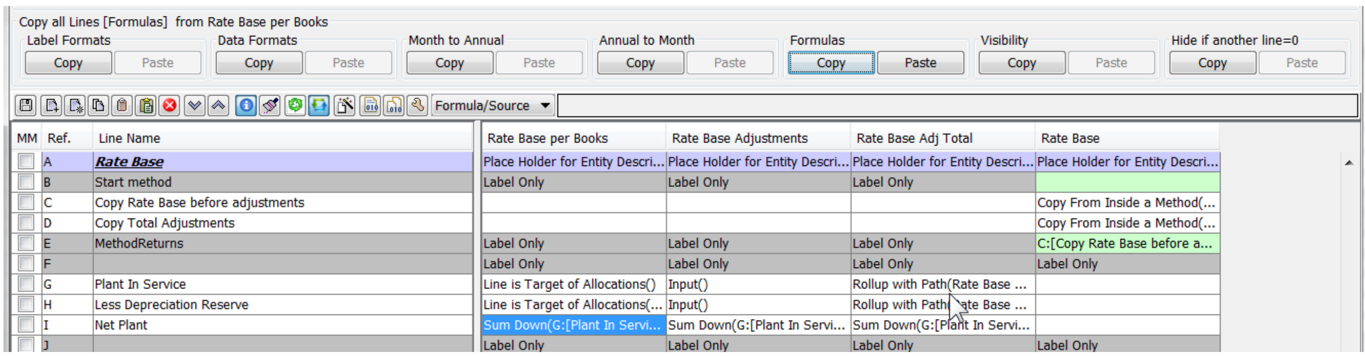


Line Settings Off



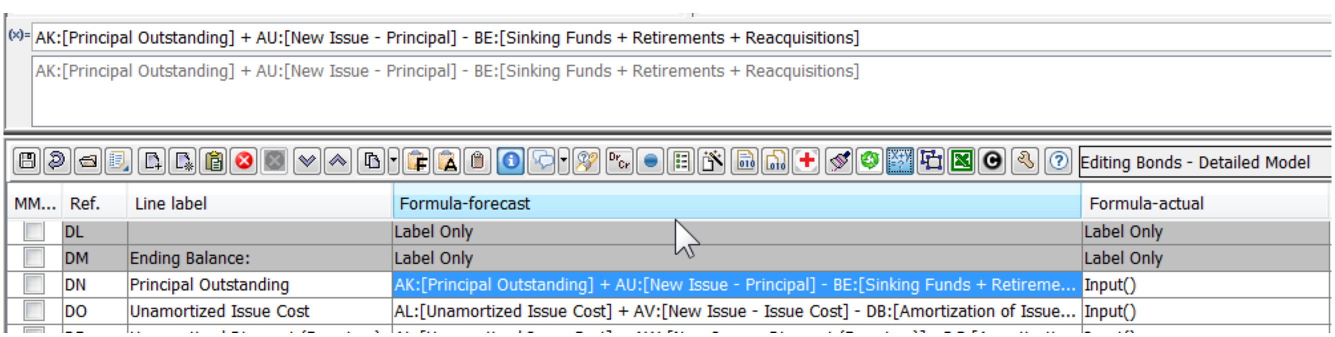
Show/Hide Copy All Lines Panel

In the Wide Calculation Editor, this button toggles on/off a panel that facilitates attributes of a line in one report to other reports in a Wide Group. See Wide Calculation Editor for more information.



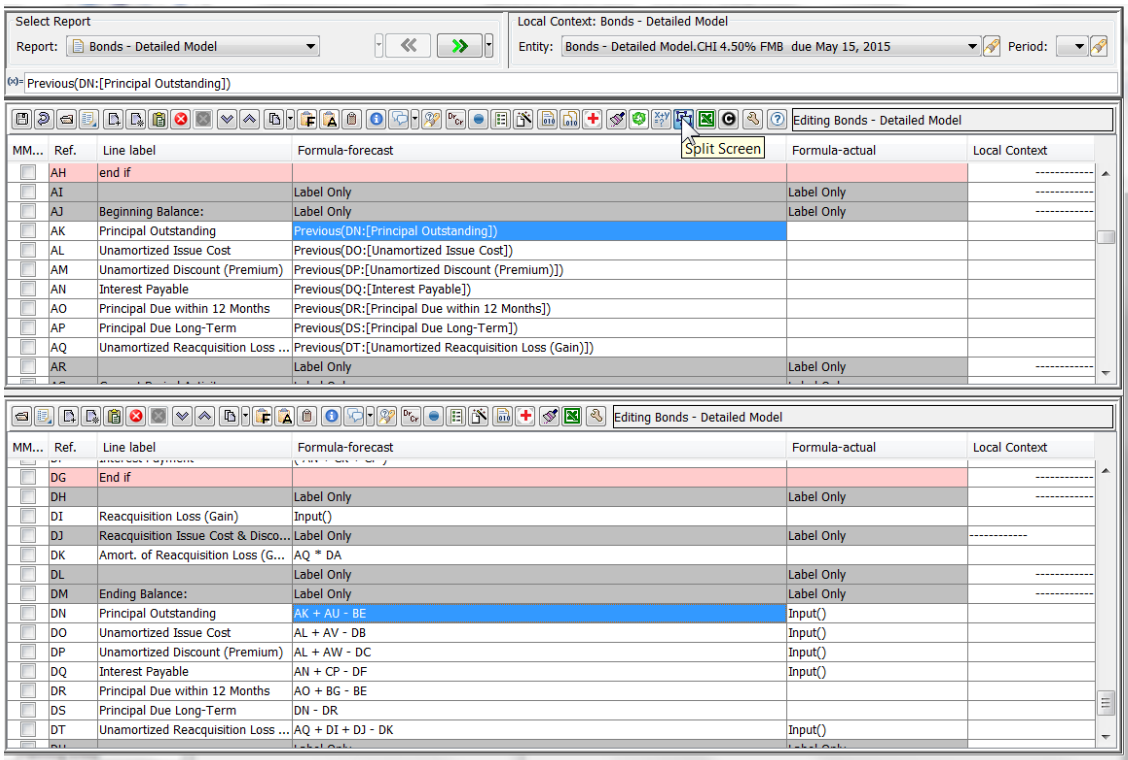
Show/Hide Long Formulas

This button enables a larger text box for line formulas. This can be helpful for lines with formulas too long to fit in the default formula box.

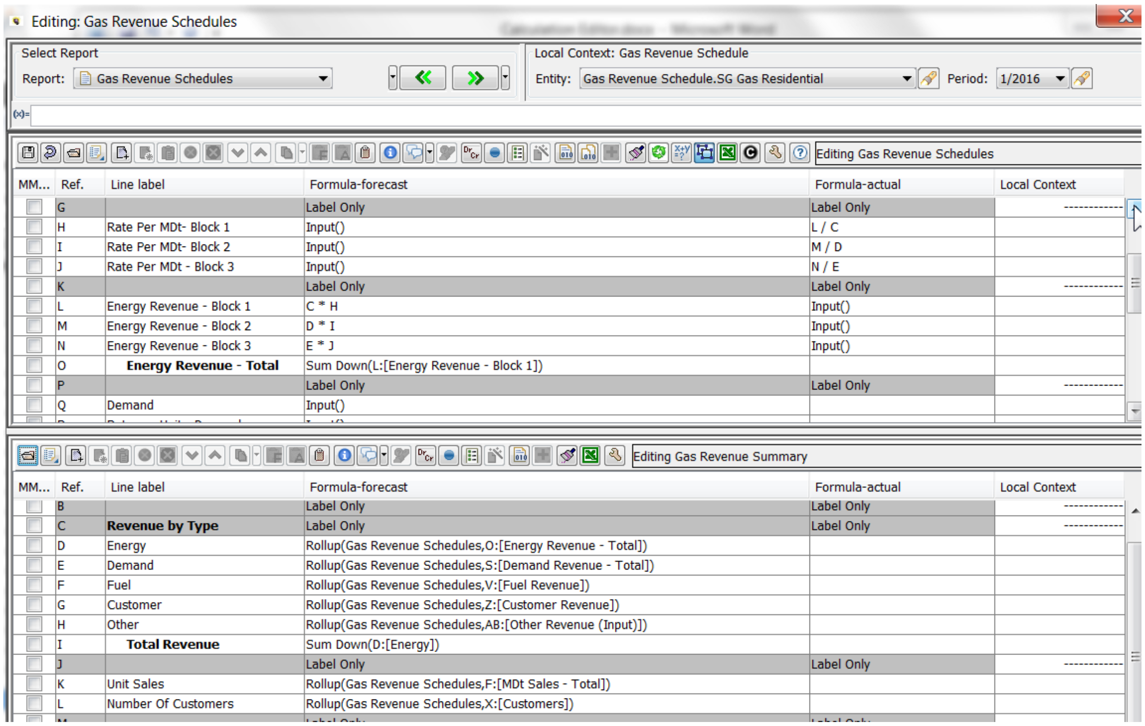


Split Screen

The Split Screen button opens a second Calculation Grid below the current one. The user can select a different region in the current report, which can assist in editing a calculation with many lines.



Alternatively, the user can select a different report in the second grid. Lines and formulas can be copied from one to another.



Edit Line Settings in Excel

This button allows the user to export the current report column settings (including line labels) to Excel, edit them there, and import them back into the database. Note that formulas and postings are not editable in Excel, nor can the user reorder lines. See below.

Editing Bonds - Detailed Model

Format Options

Edit Line Settings in Excel

Copy

MM...	Ref.	Line label	Formula-forecast	Formula-actual	Line Usage	Visibility	Month-to-Annual Code
	A		Place Holder for Entity Description	Place Holder for Entity D...	Place Holder for E...	Always show	Total (sum of months)
	B		Label Only	Label Only	Label Only	Always show	Total (sum of months)
	C	Planning Entity	Association To(Issue Type (e.g. FMB))		Formula	Always show	Total (sum of months)
	D	Issue Date YYYYMM	Attribute(Issue Date (yyyymm))		Formula	Always show	Total (sum of months)
	E	Retire Date YYYYMM	Attribute(Retire Date (yyyymm))		Formula	Always show	Total (sum of months)
	F	Issue Day (1-30)	Attribute(Issue Day)		Formula	Always show	Total (sum of months)
	G	Retire Day (1-30)	Attribute(Retire Day)		Formula	Always show	Ending Balance
	H	Sink Day (1-30)	Attribute(Sink Day)		Formula	Always show	Total (sum of months)
	I	Payment Month	Attribute(Interest Payment Month (1-12))		Formula	Always show	Total (sum of months)
	J	Months between payments	Attribute(Number of Months Between P...		Formula	Always show	Total (sum of months)
	K	Fixed Interest Rate	Attribute(Interest Rate (Fixed))		Formula	Always hide	Total (sum of months)
	L	Variable Rate Switch	Attribute(Fixed vs Variable Switch (fixe...		Formula	Always hide	12 Month Average Value
	M	New Issue Principal	Attribute(New Issue Principal)		Formula	Always hide	Total (sum of months)
	N	New Issue Issue Cost Percent	Attribute(New Issue Cost (Percent))		Formula	Always hide	Total (sum of months)
	O		Label Only	Label Only	Label Only	Always hide	Total (sum of months)
	P	prior tick	Previous(Q:[current tick])		Formula	Always hide	Total (sum of months)
	Q	current tick	P + 1		Formula	Always hide	Total (sum of months)
	R	Payment month switches:	Label Only	Label Only	Label Only	Always hide	Total (sum of months)
	S	current YYYYMM	Current Date [YYYYMM]()		Formula	Always hide	Total (sum of months)

B	C	D	E	F
Ref.	Line label	Line Usage	Visibility	Month-to-Annual Code
A		Place Holder for Entity Description	Always show	Ending Balance
B		Label Only	Always show	Ending Balance
C	Planning Entity	Formula	Always show	Ending Balance
D	Issue Date - YYYYMM	Formula	Always show	Ending Balance
E	Retire Date - YYYYMM	Formula	Always show	Ending Balance
F	Issue Day of Month (1-30)	Formula	Always show	Ending Balance
G	Retire Day of Month (1-30)	Formula	Always show	Ending Balance
H	Si		ays show	Ending Balance
I	Pay		ays show	Ending Balance
J	Months betwe		ays show	Ending Balance
K	Fixed		ays show	Ending Balance
L	Variable		ays show	Ending Balance
M	New Is		ays show	Ending Balance
N	New Issue Issue		ays show	Ending Balance
O			ays show	Ending Balance

UIPlanner Edit

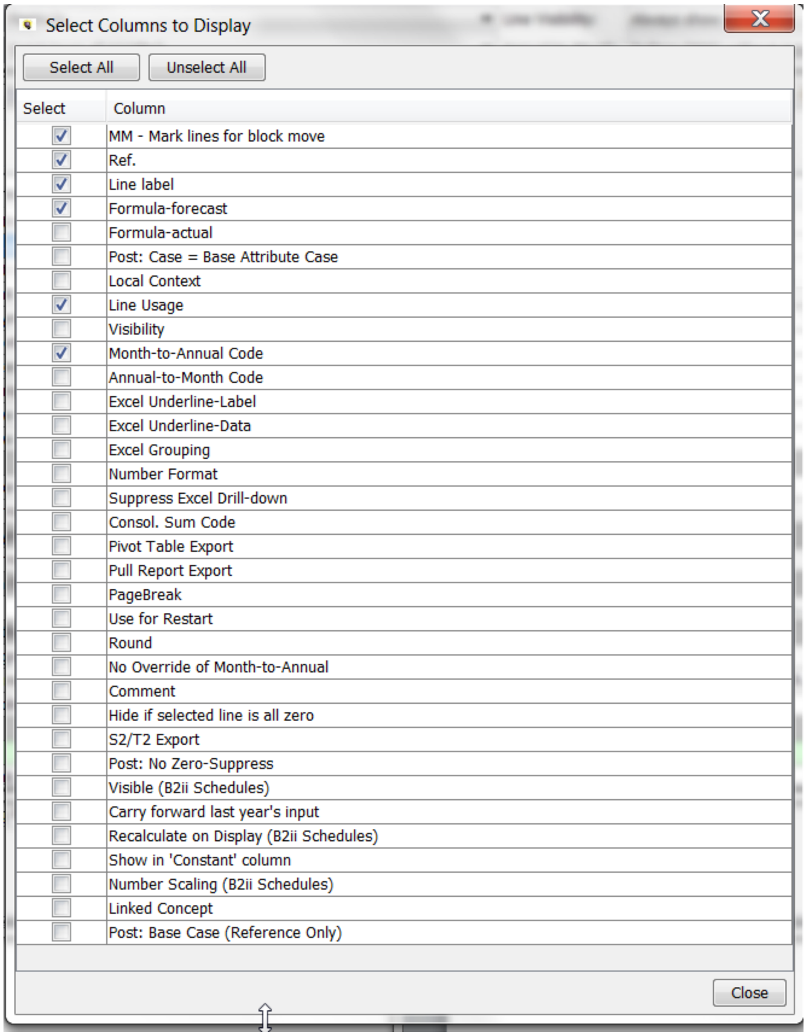
Save data to Database?

Yes No Cancel

MM...	Ref.	Line label	Formula-forecast	Formula-actual	Line Usage	Visibility	Month-to-Annual Code
	A		Place Holder for Entity Description	Place Holder for Entity D...	Place Holder for E...	Always show	Ending Balance
	B		Label Only	Label Only	Label Only	Always show	Ending Balance
	C	Planning Entity	Association To(Issue Type (e.g. FMB))		Formula	Always show	Ending Balance
	D	Issue Date - YYYYMM	Attribute(Issue Date (yyyymm))		Formula	Always show	Ending Balance
	E	Retire Date - YYYYMM	Attribute(Retire Date (yyyymm))		Formula	Always show	Ending Balance
	F	Issue Day of Month (1-30)	Attribute(Issue Day)		Formula	Always show	Ending Balance
	G	Retire Day of Month (1-30)	Attribute(Retire Day)		Formula	Always show	Ending Balance
	H	Sink Day (1-30)	Attribute(Sink Day)		Formula	Always show	Ending Balance
	I	Payment Month	Attribute(Interest Payment Month (1-12))		Formula	Always show	Ending Balance
	J	Months between payments	Attribute(Number of Months Between P...		Formula	Always show	Ending Balance
	K	Fixed Interest Rate	Attribute(Interest Rate (Fixed))		Formula	Always show	Ending Balance
	L	Variable Rate Switch	Attribute(Fixed vs Variable Switch (fixe...		Formula	Always show	Ending Balance
	M	New Issue Principal	Attribute(New Issue Principal)		Formula	Always show	Ending Balance
	N	New Issue Issue Cost Percent	Attribute(New Issue Cost (Percent))		Formula	Always show	Ending Balance

Select Columns to Display

This button opens the Columns to Display dialog, which allows the user to define the columns that are displayed in the Calculation Grid. When the user selects check boxes for specific columns and clicks Close, the calculation grid will be refreshed, displaying those selected columns. Below are the available columns. See Line Settings for further information on the functioning of these columns.



Below is the resulting Calculation Grid.

MM...	Ref.	Line label	Formula-forecast	Line Usage	Month-to-Annual Code
	E	Retire Date YYYYMM	Attribute(Retire Date (yyyymm))	Formula	Total (sum of months)
	F	Issue Day (1-30)	Attribute(Issue Day)	Formula	Total (sum of months)
	G	Retire Day (1-30)	Attribute(Retire Day)	Formula	Ending Balance
	H	Sink Day (1-30)	Attribute(Sink Day)	Formula	Total (sum of months)
	I	Payment Month	Attribute(Interest Payment Month (1-12))	Formula	Total (sum of months)
	J	Months between payments	Attribute(Number of Months Between Payments)	Formula	Total (sum of months)
	K	Fixed Interest Rate	Attribute(Interest Rate (Fixed))	Formula	Total (sum of months)
	L	Variable Rate Switch	Attribute(Fixed vs Variable Switch (fixed =0))	Formula	12 Month Average Value
	M	New Issue Principal	Attribute(New Issue Principal)	Formula	Total (sum of months)
	N	New Issue Issue Cost Percent	Attribute(New Issue Cost (Percent))	Formula	Total (sum of months)
	O		Label Only	Label Only	Total (sum of months)
	P	prior tick	Previous(Q:[current tick])	Formula	Total (sum of months)
	Q	current tick	P:[prior tick] + 1	Formula	Total (sum of months)
	R	Payment month switches:	Label Only	Label Only	Total (sum of months)

Although the entire set of columns can be displayed simultaneously, for practical purposes users would typically select only the needed columns. The examples below show columns that are typically displayed in the Calculation Grid

Financial Model

Editing Bonds - Detailed Model

MM...	Ref.	Line label	Formula-forecast	Formula-actual	Post: Case = Base Attribu...	Local Context
	DC	Amortization of Discount (Premium)	AM * DA + AW * DA * BZ		✓	18
	DD		Label Only	Label Only		------------
	DE	If	U <> 0			------------
	DF	Interest Payment	(AN + CK + CF)		✓	10,000
	DG	End if				------------
	DH		Label Only	Label Only		------------
	DI	Reacquisition Loss (Gain)	Input()		✓	0
	DJ	Reacquisition Issue Cost & Discount	Label Only	Label Only		------------
	DK	Amort. of Reacquisition Loss (Gain)	AQ * DA		✓	0
	DL		Label Only	Label Only		------------
	DM	Ending Balance:	Label Only	Label Only		------------
	DN	Principal Outstanding	AK + AU - BE	Input()		400,000
	DO	Unamortized Issue Cost	AL + AV - DB	Input()		5,799
	DP	Unamortized Discount (Premium)	AL + AW - DC	Input()		5,799
	DQ	Interest Payable	AN + CP - DF	Input()		1,611
	DR	Principal Due within 12 Months	AO + BG - BE			0
	DS	Principal Due Long-Term	DN - DR			400,000
	DT	Unamortized Reacquisition Loss (Gain)	AQ + DI + DJ - DK	Input()		0

Multidimensional

Editing: Capital - Project Calculation [Capital - Project Rollup]

EN:[Beginning Accumulated Book Reserve] + EP:[Book Depreciation (b4 excess check)] - EK:[Ending Plant In-Service]

Format Options

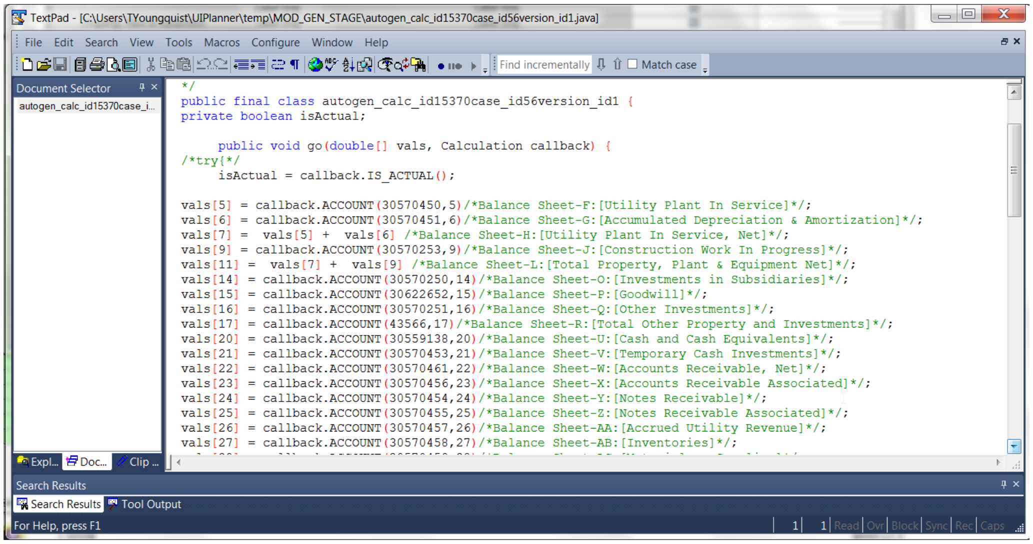
Copy

MM...	Ref.	Line label	Formula	Post: Case = Formula Case
	DO	AFUDC Debt Rate	Query Data(Capital - AFUDC Rates,Chicago Electric Company,AFUDC Debt)	
	DP	AFUDC Equity Rate	Query Data(Capital - AFUDC Rates,Chicago Electric Company,AFUDC Equity)	
	DQ	AFUDC Debt	(DJ:[AFUDC Basis] * DO:[AFUDC Debt Rate] * DM:[In Service Multiplier]) / 12	
	DR	AFUDC Equity	(DJ:[AFUDC Basis] * DP:[AFUDC Equity Rate] * DM:[In Service Multiplier]) / 12	
	DS	**Total AFUDC**	DQ:[AFUDC Debt] + DR:[AFUDC Equity]	
	DT		Label Only	
	DU	**Closings**	Label Only	
	DV	if	CZ:[Current Date] >= DC:[Project In Service Date] OR E:[Blanket?] = 1	
	DW	Closing Flag	1	
	DX	end if	DV:[if]	

The Black C can be used to display all the other columns. Note that these columns cannot be reordered. Once a column is displayed, the values in it can be edited in Excel. See the Edit in Excel button.

View Generated Source

This button brings up a dialog that shows the java code that is generated by the compiler. Requires that the Planner Property for the text editor be set. Applicable to Financial Model reports only.



Launch Help

This button launches the UIPlanner online Help topic for the Calculation Editor.

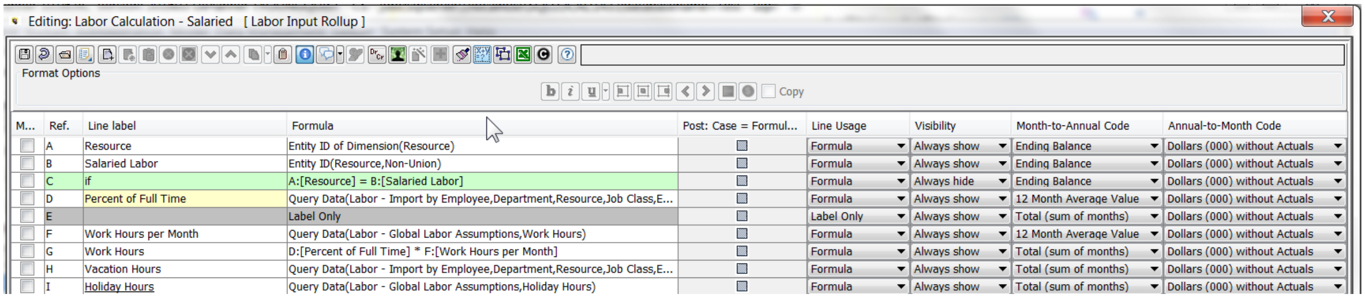
Line Settings

Each line in a calculation can be assigned various settings or characteristics. The most commonly used of these are the following:

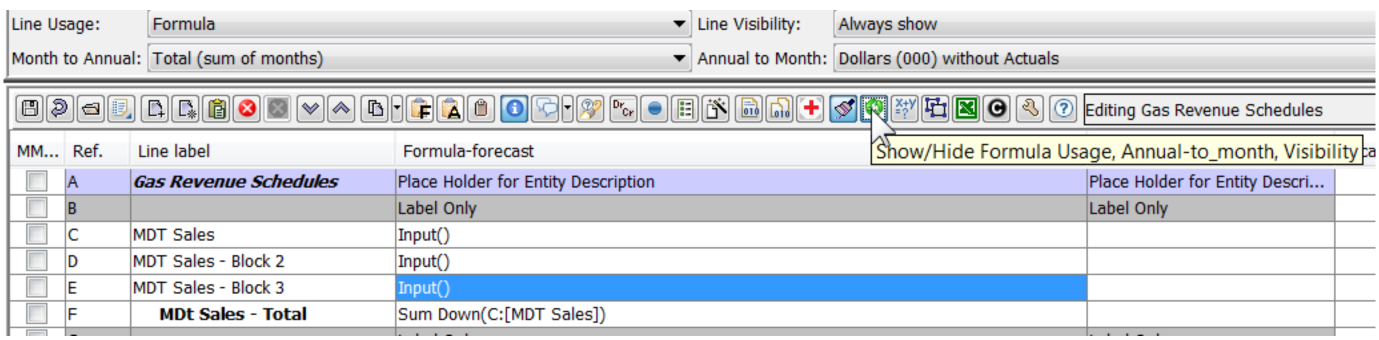
- Line Usage – defines how the line is used in the calculation (formula, label, etc.)
- Line Visibility – used to show or hide lines in a calculation
- Month to Annual – defines how the line will be displayed in an annual view (e.g., sum of months vs ending balance)
- Annual to Month – defines how annual input for time dependent data will be stored in UIPlanner and interpreted when used in the report.

There are a number of other line settings available to users. These can affect the amount on a line (e.g., Round, Carry forward Last Year Input) , tag lines for actions (S2/T2 Transfer), or define how a line behaves in a report (Page Break). These can be displayed as columns in the grid, using Select Columns to Display (the Black C). See Columns to Display.

Below are the four most commonly used line settings. For **Multidimensional and Customer Revenue** calculations, these need to be set from columns in the grid.



For **Financial Model calculations**, these four line settings can also be displayed in a panel.



Line Usage

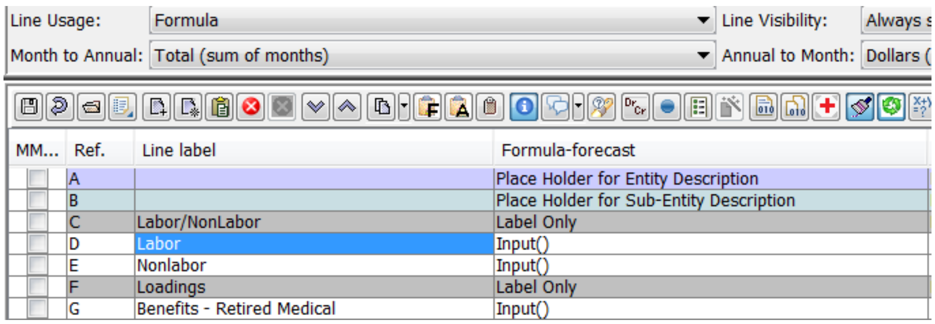
The line usage determines how the line will be used in the calculation.

- Formula – Allows the user to enter mathematical operators, line references, functions or if-tests. The UIPlanner engine will process the logic entered in the formula columns
- Label Only – the line will show nothing in the amount cells. Typically used to label report sections or to add comments to the calculation, or to turn off a line from processing
- Comment – similar to label line

- Place Holder for Entity Description – prints the name of the entity currently being processed (typically set as the first line in the report). Financial Model only
- Place Holder for Sub-Entity Description – for 2D reports, prints the name of the second entity. Financial Model only

Below is further information on each one.

Placeholder for Entity Description/Sub-Entity Description



Line Visibility

Line Visibility this is used to show or hide lines on a report.

- Always show – the line is always displayed. This setting is the default
- Always hide – the line is never displayed. This is commonly used to suppress display of label/comment lines or If/End If lines
- Suppress if all zero - If all months are zero the line will not be displayed

There is an additional line setting that allows the user to hide a line based on another line being zero. See Hide if Selected Line is Zero.

Note that in Financial Model reports, the Report Labels tab allows the user to override the visibility settings and display all lines. See Browse Reports.

Month to Annual

This setting defines how amounts will be displayed when a report is shown with annual columns. Typical reports will have monthly columns with a total. The default setting is to total the months and display that total in the annual column (e.g., O&M or Income Statements). However, there are situations where the user would not want to show the sum of months, such as the Balance Sheet, or lines that are rates or percents. Below are the options:

- Total (sum of months) – The Annual column will be the sum of the months. This is the default setting for all lines in a report
- Beginning Balance - Beginning balance of the year
- Peak Value - Peak value in the last 12 months
- Ending Balance - Last monthly value of the year
- Average Value - Average of the monthly values (12)
- No Annual Value - Annual column will be blank
- Rolling 12 Month's Total - Total of the last 12 months
- 13 Month Average Value - Average value using the last 13 months
- 2 Point (Beg+End)/2 Average - Beginning and ending average

Annual to Month

The Annual to Month setting defines how monthly data is determined when annual data is entered in time-dependent data. All time-dependent data is stored as 12 monthly numbers in UIPlanner. If time-dependent data is input as one number for each year (annual), the engine needs to determine how to spread this annual number back to months. This setting also provides efficient rules for handing percent inputs.

- Dollars (000) with Actuals – Annual value is divided by 12 to generate monthly values.
- Dollars (000) without Actuals – Annual value is divided by 12 for the monthly values.
- Percent – divided by 12 for Monthly (e.g., Interest Rates) – Allows the user to enter the annual percent as an integer either monthly or annually. UIPlanner will put the annual percent in all months, but at runtime will divide by 12 to use a monthly rate.

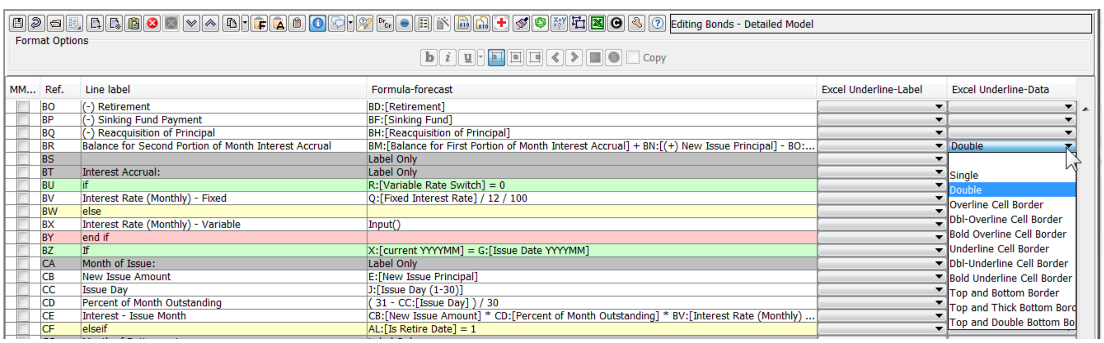
- Percent – same value for month or annual (e.g., Tax Rates) - Allows the user to enter the annual percent as an integer either monthly or annually. UIPlanner will put the annual percent in all months, but at runtime will use the same rate.
- Peak Value – Highest value in the time period.xx.
- Average Value – Annual value is divided by 12 for the monthly values.
- Statistics with Actuals – Amounts that are non-dollar and therefore will not be scaled
- Statistics without Actuals – Amounts that are non-dollar and therefore will not be scaled

Note that there is a Planner Property to define the default setting for newly inserted or added lines (Dollars with Actuals or Dollars without Actuals). There is also a User Preference to set this on a user level.

Below are the additional line settings. If a setting is applicable only to Financial Model calculations or Multidimensional calculations, this is indicated.

Excel Underline-Label

This option allows the user to view the Excel underline options for labels in a column format. Note that these are available by line in the Line Format buttons. *Financial Model only*



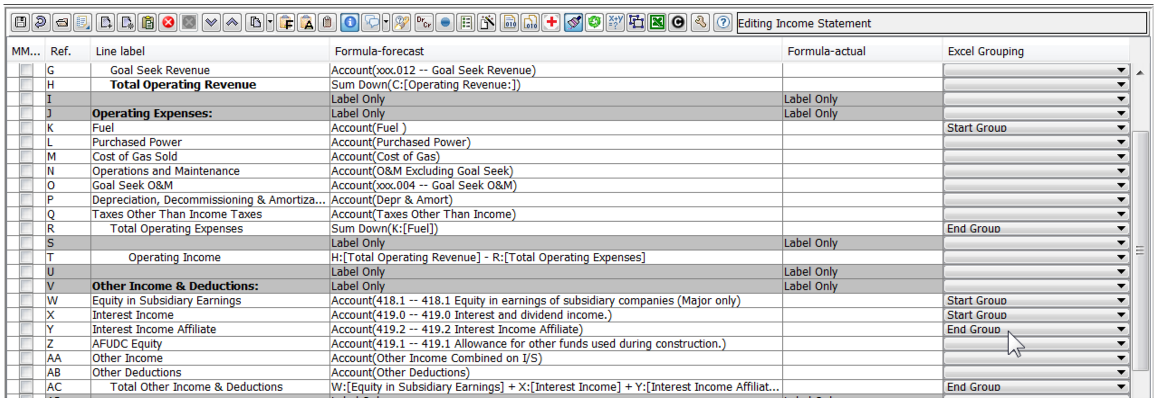
Excel Underline-Data

This option allows the user to view the Excel underline options for data in a column format. Note that these are available by line in the Format buttons. *Financial Model only*

See above.

Excel Grouping

This column option allows the user to define Excel groupings on the lines in the calculation. Use the drop down box to tag the lines as desired, with Start Group and End Group. Groups can be nested. *Financial Model only*



Editing Income Statement

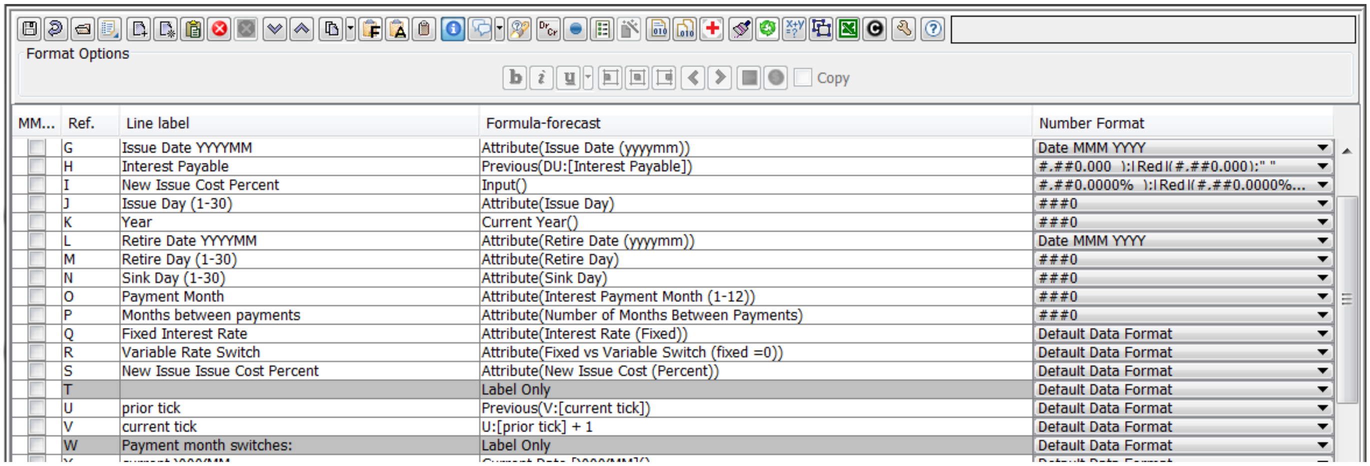
MM...	Ref.	Line label	Formula-forecast	Formula-actual	Excel Grouping
	G	Goal Seek Revenue	Account(xxx.012 -- Goal Seek Revenue)		
	H	**Total Operating Revenue**	Sum Down(C:[Operating Revenue:])		
	I		Label Only	Label Only	
	J	**Operating Expenses:**	Label Only	Label Only	
	K	Fuel	Account(Fuel)		Start Group
	L	Purchased Power	Account(Purchased Power)		
	M	Cost of Gas Sold	Account(Cost of Gas)		
	N	Operations and Maintenance	Account(O&M Excluding Goal Seek)		
	O	Goal Seek O&M	Account(xxx.004 -- Goal Seek O&M)		
	P	Depreciation, Decommissioning & Amortiza...	Account(Depr & Amort)		
	Q	Taxes Other Than Income Taxes	Account(Taxes Other Than Income)		
	R	Total Operating Expenses	Sum Down(K:[Fuel])		End Group
	S		Label Only	Label Only	
	T	Operating Income	H:[Total Operating Revenue] - R:[Total Operating Expenses]		
	U		Label Only	Label Only	
	V	**Other Income & Deductions:**	Label Only	Label Only	
	W	Equity in Subsidiary Earnings	Account(418.1 -- 418.1 Equity in earnings of subsidiary companies (Major only)		Start Group
	X	Interest Income	Account(419.0 -- 419.0 Interest and dividend income.)		Start Group
	Y	Interest Income Affiliate	Account(419.2 -- 419.2 Interest Income Affiliate)		End Group
	Z	AFUDC Equity	Account(419.1 -- 419.1 Allowance for other funds used during construction.)		
	AA	Other Income	Account(Other Income Combined on I/S)		
	AB	Other Deductions	Account(Other Deductions)		
	AC	Total Other Income & Deductions	W:[Equity in Subsidiary Earnings] + X:[Interest Income] + Y:[Interest Income Affiliat...		End Group

Below is the resulting report in Excel

	A	B	C	D
1				
2	Detail Model 2016-2020 Base Plan - Cut O&M	Year 2014	Year 2015	Year 2016
3				
4	***UI Energy Consolidated***			
5	B:[]			
6	**C:[Operating Revenue:]**			
7	D:[Electric Revenue]	**$6,688,882**	**$6,859,037**	**$7,032,168**
8	E:[Gas Revenue]	1,514,233	1,542,293	1,570,818
9	F:[Affiliate Revenue]			
10	G:[Goal Seek Revenue]		(121,048)	(205,017)
11	**H:[Total Operating Revenue]**	**$8,203,114**	**$8,280,282**	**$8,397,970**
12	I:[]			
13	**J:[Operating Expenses:]**			
14	K:[Fuel]	2,814,731	2,897,104	2,978,410
15	L:[Purchased Power]	308,832	316,468	324,300
16	M:[Cost of Gas Sold]	492,125	501,967	512,006
17	N:[Operations and Maintenance]	829,433	883,006	902,760
18	P:[Depreciation, Decommissioning & Amortization	1,008,248	1,032,901	1,104,696
19	Q:[Taxes Other Than Income Taxes]	292,121	298,255	305,115
20	R:[Total Operating Expenses]	**$5,745,489**	**$5,929,700**	**$6,127,288**
21	S:[]			
22	T:[Operating Income]	**$2,457,625**	**$2,350,581**	**$2,270,682**
23	U:[]			
24	**V:[Other Income & Deductions:]**			
25	W:[Equity in Subsidiary Earnings]			
26	X:[Interest Income]	3,655	3,396	2,152
27	Y:[Interest Income Affiliate]	0	(0)	(0)
28	Z:[AFUDC Equity]	6,105	10,568	1,205
29	AB:[Other Deductions]			
30	AC:[Total Other Income & Deductions]	**$9,760**	**$13,964**	**$3,357**
31	AD:[]			

Number Format

This column setting allows the user to view/set the number format for the data. This makes it easier to view the data format, rather than enabling Local Context and setting it line by line. Note that line formats can also be set in Browse Reports. *Financial Model only*

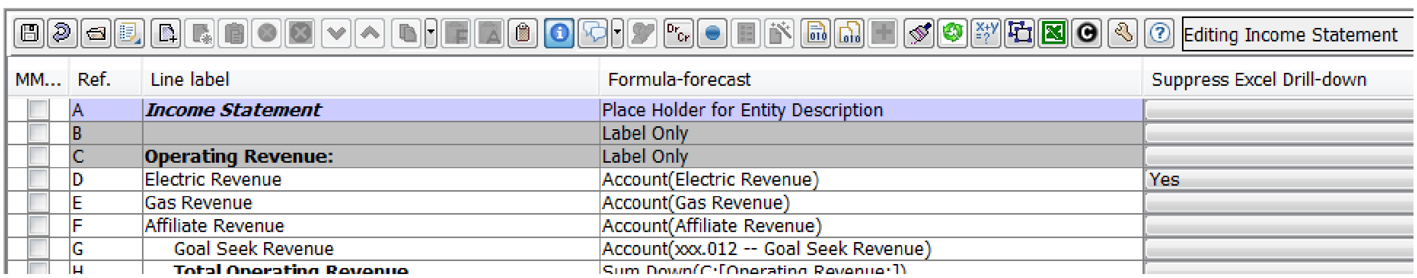


Format Options

MM...	Ref.	Line label	Formula-forecast	Number Format
	G	Issue Date YYYYMM	Attribute(Issue Date (yyyymm))	Date MMM YYYY
	H	Interest Payable	Previous(DU:[Interest Payable])	#,##0.000_);[Red](#,##0.000);" "
	I	New Issue Cost Percent	Input()	#,##0.0000%_);[Red](#,##0.0000%...
	J	Issue Day (1-30)	Attribute(Issue Day)	###0
	K	Year	Current Year()	###0
	L	Retire Date YYYYMM	Attribute(Retire Date (yyyymm))	Date MMM YYYY
	M	Retire Day (1-30)	Attribute(Retire Day)	###0
	N	Sink Day (1-30)	Attribute(Sink Day)	###0
	O	Payment Month	Attribute(Interest Payment Month (1-12))	###0
	P	Months between payments	Attribute(Number of Months Between Payments)	###0
	Q	Fixed Interest Rate	Attribute(Interest Rate (Fixed))	Default Data Format
	R	Variable Rate Switch	Attribute(Fixed vs Variable Switch (fixed =0))	Default Data Format
	S	New Issue Issue Cost Percent	Attribute(New Issue Cost (Percent))	Default Data Format
	T		Label Only	Default Data Format
	U	prior tick	Previous(V:[current tick])	Default Data Format
	V	current tick	U:[prior tick] + 1	Default Data Format
	W	Payment month switches:	Label Only	Default Data Format

Suppress Excel Drill-down

This setting allows the user to tag a specific line to not have drill-down in Excel. This overrides the Report Group settings in Browse Reports. Note that Electric Revenue does not have drill-down. *Financial Model only.*



Editing Income Statement

MM...	Ref.	Line label	Formula-forecast	Suppress Excel Drill-down
	A	***Income Statement***	Place Holder for Entity Description	
	B		Label Only	
	C	**Operating Revenue:**	Label Only	
	D	Electric Revenue	Account(Electric Revenue)	Yes
	E	Gas Revenue	Account(Gas Revenue)	
	F	Affiliate Revenue	Account(Affiliate Revenue)	
	G	Goal Seek Revenue	Account(xxx.012 -- Goal Seek Revenue)	

	A	C	D
1			
2	Detail Model 2016-2020 Base Plan - Cut O&M	Jan 2016	Feb 2016
3			
4	***UI Energy Consolidated***		
5	B:[]		
6	**C:[Operating Revenue:]**		
7	D:[Electric Revenue]	**$621,819**	**$566,103**
8	Credits		
9	Post from Report: Gas Revenue Schedules (Gas Rev	241,155	178,823
10	Post from Report: Gas Revenue Schedules (Gas Rev	29,244	29,993
11	Post from Report: Gas Revenue Schedules (Gas Rev	17,474	6,114
12	Post from Report: Gas Revenue Schedules (Gas Rev	2,218	1,863
13	Post from Report: Gas Revenue Schedules (Gas Rev	773	608
14	Post from Report: Gas Revenue Schedules (Gas Rev	156	169
15	Post from Report: Gas Revenue Schedules (Gas Rev	1,423	1,370
16	Post from Report: Gas Revenue Schedules (Gas Rev	820	804
17	Post from Report: Gas Revenue Schedules (Gas Rev	603	610
18	Post from Report: Gas Revenue Schedules (Gas Rev	77	75
19	Post from Report: Gas Revenue Schedules (Gas Rev	183	189
20	Post from Report: Gas Revenue Schedules (Gas Rev	23,962	23,870
21	Post from Report: Gas Revenue Schedules (Gas Rev	7,319	7,271
22	Post from Report: Gas Revenue Schedules (Gas Rev	997	1,005
23	Post from Report: Gas Revenue Schedules (Gas Rev	1,384	1,388
24	E:[Gas Revenue]	327,788	254,153
59	F:[Affiliate Revenue]		
62	G:[Goal Seek Revenue]	(17,381)	(17,400)
63	**H:[Total Operating Revenue]**	**$932,225**	**$802,856**
64	I:[]		

Consol. Sum Code

This line setting allows the user to determine what will be displayed for consolidations or sum of entities.

Editing Ratios & Statistics

MM...	Ref.	Line label	Formula-forecast	Consol. Sum Code
	A	**Ratios & Statistics**	Place Holder for Entity Description	Total (sum of subs)
	B		Label Only	Total (sum of subs)
	C	Common Shares	Copy From Specific Entity(Common Stock,AB:[End of Period],System Total)	Same for all (e.g. Shares)
	D		Label Only	Total (sum of subs) / Same for all (e.g. Shares) / Print nothing
	E	Capitalization Balances:	Label Only	
	F	Notes Payable	Account(Notes Payable)	
	G	Notes Payable Associated	Account(Notes Payable Associated)	Total (sum of subs)
	H	Current Portion of Long-Term Debt	Account(Long-Term Debt Current)	Total (sum of subs)
	I	Long-Term Debt	Account(Total Long-term Debt)	Total (sum of subs)
	J	Preferred Stock	Account(Preferred Stock)	Total (sum of subs)

See the result – when summing Planning Entity, the shares are not summed.

Report: Ratios & Statistics

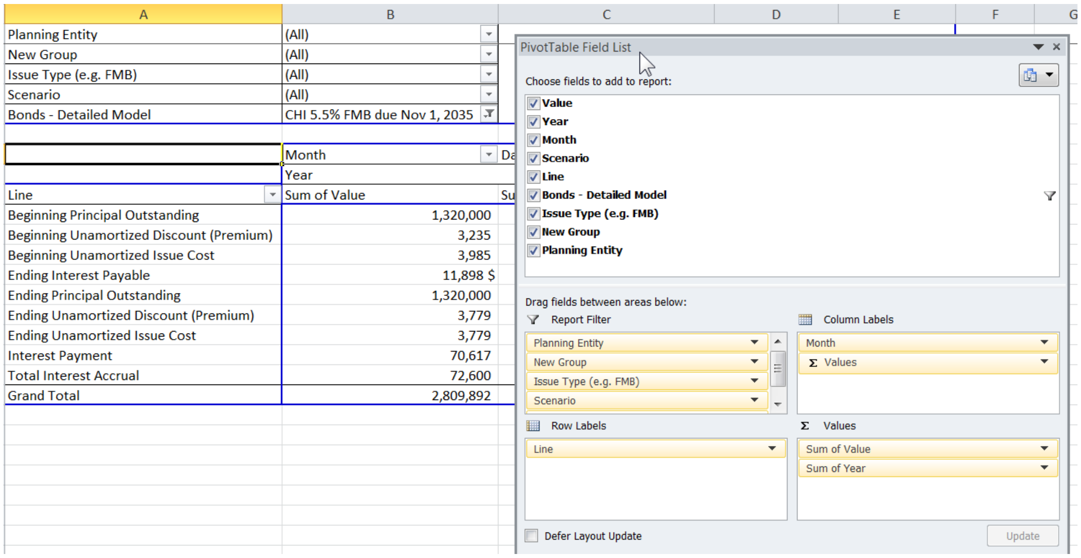
Detail Model 2016-2020 Base Plan - Cut O&M	Year 2016	Year 2017
Chicago Electric		
Common Shares	378,984	379,539
Capitalization Balances:		
Notes Payable	139,524,818	174,166,736
Notes Payable Associated	0	0
Current Portion of Long-Term Debt	1,075,000	275,000
Chicago Gas		
Common Shares	378,984	379,539
Capitalization Balances:		
Notes Payable	133,832,592	161,562,325
Notes Payable Associated	0	0
Current Portion of Long-Term Debt	175,000	205,000
Planning Entity Total		
Common Shares	378,984	379,539
Capitalization Balances:		
Notes Payable	273,357,411	335,729,060
Notes Payable Associated	0	0
Current Portion of Long-Term Debt	1,250,000	480,000

Pivot Table Export

This option allows the user to tag certain lines on a report for export to a pivot table via Browse Reports. Note that the right click option to send a model report to a Pivot report generally supersedes this feature, but is useful if the client does not have the right click to Pivot Report. *Financial Model only*

Editing Bonds - Detailed Model

MM...	Ref.	Line label	Formula-forecast	Pivot Table Export
	AN		Label Only	
	AO	Beginning Balance:	Label Only	
	AP	Beginning Principal Outstanding	Previous(DR:[Ending Principal Outstanding])	Yes
	AQ	Beginning Unamortized Issue Cost	Previous(DS:[Ending Unamortized Issue Cost])	Yes
	AR	Beginning Unamortized Discount (Premium)	Previous(DT:[Ending Unamortized Discount (Premium)])	Yes
	AS	Principal Due within 12 Months	Previous(DV:[Principal Due within 12 Months])	
	AT	Principal Due Long-Term	Previous(DW:[Principal Due Long-Term])	
	AU	Unamortized Reacquisition Loss (Gain)	Previous(DX:[Unamortized Reacquisition Loss (Gain)])	
	AV		Label Only	
	AW	Current Period Activity:	Label Only	
	AX	If	G:[Issue Date YYYYMM] = X:[current YYYYMM]	
	AY	New Issue - Principal	E:[New Issue Principal]	Yes
	AZ	New Issue - Issue Cost	AY:[New Issue - Principal] * S:[New Issue Issue Cost Percent] / 100	
	BA	New Issue - Discount (Premium)	Label Only	
	BB	end if		



Pull Report Export

The Pull Report export setting allows the user to specify that a line NOT be exported when the report is exported for Pull Reports. The default is Yes. A typical usage of this is for a long report where the user only needs to export certain lines. The user would set all lines to NO, and then tag only the lines to sent back to Yes.

PageBreak

This line setting is used to define hard page breaks when the report is sent to Excel. *Financial Model only – note that Multidimensional Pivot Reports allow the user to set page breaks.*

Editing Summary I/S B/S C/F

MM...	Ref.	Line label	Formula-forecast	PageBreak
	AC	Net Income	Y:[Earnings Before Taxes] - AA:[Income Taxes]	
	AD		Label Only	
	AE	Average Common Shares	Copy From(Common Stock,AD:[13-month Average])	
	AF		Label Only	
	AG	Earnings Per Share	Ratio(AC:[Net Income],AE:[Average Common Shares])	
	AH		Label Only	✓
	AI	**Selected Balance Sheet Items:**	Label Only	
	AJ	Utility Plant	Account(Utility Plant In Service)	
	AK	Accumulated Depreciation	Account(Accumulated Depreciation & Amortization)	
	AL	Utility Plant in Service, Net	Account(Total Property, Plant, & Equipment)	
	AM	Other Property & Investments	Account(Other Property and Investments)	
	AN	Current and Accrued Items	Account(Current And Accrued Assets)	
	AO	Deferred Debits	Account(Deferred Debits)	
	AP	Total Assets	Account(Asset)	
	AQ		Label Only	
	AR	Equity	Account(Total Common Equity)	
	AS	Preferred Stock	Account(Preferred Stock)	
	AT	Long-term Debt	Account(Total Long-term Debt)	
	AU	Current Liabilities	Account(Current And Accrued Liabilities)	
	AV	Deferrred Credits	Account(Deferred Credits)	
	AW	Total Liabilities & Equity	Account(Liability)	
	AX		Label Only	✓
	AY	**Selected Cash Flow Items:**	Label Only	
	AZ	Net Income	Account(Net Income Cash Flow)	
	BA	Items Not Requiring Cash	Account(Items Not Requiring Cash)	
	BB	Changes in Assets & Liabilities	Account(Changes in Assets & Liabilities)	
	BC	Net Cash From Operations	Sum Down(AZ:[Net Income])	
	BD		Label Only	

Below is the report as sent to Excel, with the defined page breaks at lines 28 and 44. Note that the user needs to set the Export Page Breaks to Excel in Browse Reports.

	A	B	C	D	E	F
1						
2	Detail Model 2016-2020 Base Plan - Cut	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018
3						
4	***Chicago Electric***					
5						
6	Gross Margin:					
7	Total Revenue	4,907,313	5,024,157	5,142,379	5,649,934	6,034,227
8	Total Energy Costs	2,300,377	2,369,389	2,440,470	2,513,685	2,589,095
9	Gross Margin	2,606,935	2,654,768	2,701,909	3,136,249	3,445,132
10						
11	O&M Before Goal Seeking	672,000	711,884	731,784	742,040	754,295
12	Goal Seeking O&M					
13	O&M	672,000	711,884	731,784	742,040	754,295
14	Taxes Other Than Income	147,873	150,978	154,451	157,076	161,160
15	EBITDA	1,787,062	1,791,906	1,815,674	2,237,133	2,529,677
16	Depreciation & Amortization	482,658	493,539	496,696	505,100	515,065
17	EBIT	1,304,404	1,298,368	1,318,979	1,732,034	2,014,611
18	Total Interest Expense	197,412	225,335	211,211	142,121	127,195
19	Total Other Income	3,148	3,034	551	609	639
20	Earnings Before Taxes	1,110,140	1,076,066	1,108,319	1,590,522	1,888,056
21						
22	Income Taxes	387,814	374,777	280,397	647,599	691,843
23	Net Income	722,326	701,289	827,921	942,923	1,196,213
24						
25	Average Common Shares	377,742	378,314	378,868	379,422	379,983
26						
27	Earnings Per Share	$1.91	$1.85	$2.19	$2.49	$3.15
28						
29	**Selected Balance Sheet Items:**					
30	Utility Plant	17,831,077	18,336,177	18,667,982	19,034,731	19,419,468
31	Accumulated Depreciation	(7,722,370)	(8,215,811)	(8,712,507)	(9,217,607)	(9,732,672)
32	Utility Plant in Service, Net	10,371,207	10,260,862	10,095,971	9,957,620	9,827,293
33	Other Property & Investments					
34	Current and Accrued Items	4,877,487	8,284,666	11,762,584	15,323,176	18,947,539
35	Deferred Debits	328,063	337,356	334,728	333,132	331,653
36	Total Assets	15,576,757	18,882,884	22,193,283	25,613,929	29,106,485
37						
38	Equity	5,788,056	6,027,700	6,385,720	6,850,464	7,560,189
39	Long-term Debt	3,602,475	3,730,110	2,657,738	2,659,334	2,520,813
40	Current Liabilities	4,941,616	7,899,454	11,898,267	14,849,931	17,753,706
41	Deferrred Credits	1,244,609	1,225,619	1,251,559	1,254,200	1,271,777
42	Total Liabilities & Equity	15,576,757	18,882,884	22,193,283	25,613,929	29,106,485
43						
44	**Selected Cash Flow Items:**					
45	Net Income	722,326	701,289	827,921	942,923	1,196,213
46	Items Not Requiring Cash	370,823	391,446	442,599	425,976	449,169
47	Changes in Assets & Liabilities	(3,179,989)	(3,150,294)	(3,346,044)	(3,431,502)	(3,540,429)

Use for Restart

No longer used.

Round

This line setting allows the user to round the results of a given line. This is an alternative to using the UIPlanner Round() function, which takes two lines. Below are the line settings, input data and report results. Note that the amounts have been rounded according to the line settings.

Ref.	Line label	Formula-forecast	Round
A		Place Holder for Entity Description	
B		Label Only	
C	Federal Income Tax Rate	Input()	2
D	State Income Tax Rate	Input()	4
E	Composite Tax Rate	Input()	4
F	Benefits Loading Rate	Input()	3
G		Label Only	

0
1
2
3
4
5
6
7
8
9
-1
-2
-3
-4
-5

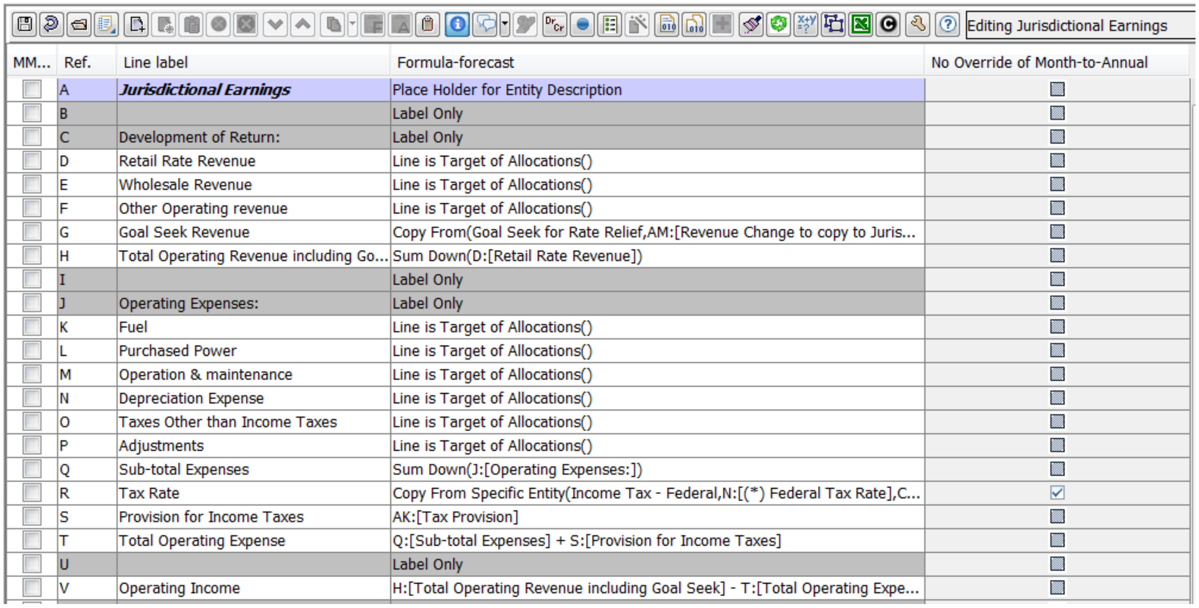
System-Wide Rates	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016
Data from Budget System												
System Total												
C:[Federal Income Tax Rate]	35	35	35	35	35	35	35	35	35	35	35	35
D:[State Income Tax Rate]	8.887	8.887	8.887	8.887	8.887	8.887	8.887	8.887	8.887	8.887	8.887	8.887
E:[Composite Tax Rate]	40.657	40.657	40.657	40.657	40.657	40.657	40.657	40.657	40.657	40.657	40.657	40.657
F:[Benefits Loading Rate]	25.265566	25.266	25.266	25.266	25.266	25.266	25.266	25.266	25.266	25.266	25.266	25.266

Report: System-Wide Rates

2014 - 2018 Capital Forecast	Jan 2016	Feb 2016	Mar 2016
System Total			
B:[]			
C:[Federal Income Tax Rate]	0.35000	0.35000	0.35000
D:[State Income Tax Rate]	0.08890	0.08890	0.08890
E:[Composite Tax Rate]	0.40660	0.40660	0.40660
F:[Benefits Loading Rate]	0.25300	0.25300	0.25300
G:[]			

No Override of Month-to-Annual

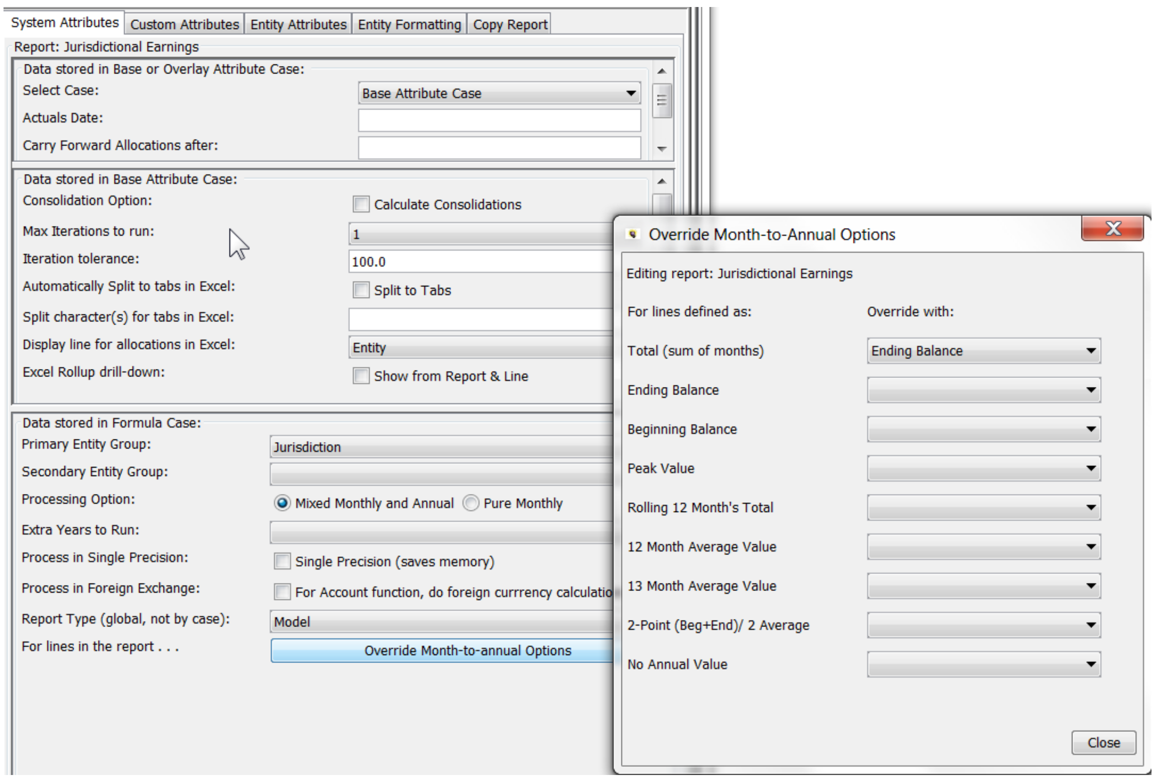
This setting allows the user to specify that the Month-to-Annual setting on a given line cannot be later overridden (e.g. using the Shared Reports option on Group Reports). For example, there may be shared reports that are annual (thus month-to-annual is ending balance) and also (shared) monthly (thus month-to-annual is Sum of Months). This report may have a Tax rate – for both versions the user would want that line to be Ending Balance. *Financial Model only.*



Editing Jurisdictional Earnings

MM...	Ref.	Line label	Formula-forecast	No Override of Month-to-Annual
☐	A	***Jurisdictional Earnings***	Place Holder for Entity Description	☐
☐	B		Label Only	☐
☐	C	Development of Return:	Label Only	☐
☐	D	Retail Rate Revenue	Line is Target of Allocations()	☐
☐	E	Wholesale Revenue	Line is Target of Allocations()	☐
☐	F	Other Operating revenue	Line is Target of Allocations()	☐
☐	G	Goal Seek Revenue	Copy From(Goal Seek for Rate Relief,AM:[Revenue Change to copy to Juris...	☐
☐	H	Total Operating Revenue including Go...	Sum Down(D:[Retail Rate Revenue])	☐
☐	I		Label Only	☐
☐	J	Operating Expenses:	Label Only	☐
☐	K	Fuel	Line is Target of Allocations()	☐
☐	L	Purchased Power	Line is Target of Allocations()	☐
☐	M	Operation & maintenance	Line is Target of Allocations()	☐
☐	N	Depreciation Expense	Line is Target of Allocations()	☐
☐	O	Taxes Other than Income Taxes	Line is Target of Allocations()	☐
☐	P	Adjustments	Line is Target of Allocations()	☐
☐	Q	Sub-total Expenses	Sum Down(J:[Operating Expenses:])	☐
☐	R	Tax Rate	Copy From Specific Entity(Income Tax - Federal,N:[(*) Federal Tax Rate],C...	☑
☐	S	Provision for Income Taxes	AK:[Tax Provision]	☐
☐	T	Total Operating Expense	Q:[Sub-total Expenses] + S:[Provision for Income Taxes]	☐
☐	U		Label Only	☐
☐	V	Operating Income	H:[Total Operating Revenue including Goal Seek] - T:[Total Operating Expe...	☐

Below is the Group Reports override.



Comment

Allows the user to enter an in-line comment. This can be displayed in Browse Reports, using a report column set with the Comment Attribute setting. Financial Model only

Editing Bonds - Detailed Model

M...	Ref.	Line label	Formula-forecast	Comment
	AW	Current Period Activity:	Label Only	
	AX	If	G:[Issue Date YYYYMM] = X:[current YYYYMM]	
	AY	New Issue - Principal	E:[New Issue Principal]	Pull in new issue amount (attribute)
	AZ	New Issue - Issue Cost	AY:[New Issue - Principal] * S:[New Issue Issue Cost Percent] / 100	Calculate new issue cost
	BA	New Issue - Discount (Premium)	Label Only	
	BB	end if		

Below is the resulting report in Browse Reports.

Report: Bonds - Detailed Model

Detail Model 2016-2020 Base Plan - Cut O&M	Line Comment	Jan 2016
AS:[Principal Due within 12 Months]		1,942,500
AT:[Principal Due Long-Term]		5,251,674
AU:[Unamortized Reacquisition Loss (Gain)]		0
AV:[]		
AW:[Current Period Activity:]		
AY:[New Issue - Principal]	Pull in new issue amount (attribute)	100,000
AZ:[New Issue - Issue Cost]	Calculate new issue cost	1,500
BA:[New Issue - Discount (Premium)]		
BD:[Retirement]		0

Hide if selected line is all zero

This option allows the user to hide a line based on the value on another line. A common usage of this is a report that runs over an entity group with multiple entities, but the user wants to show only certain lines for certain entities, and hide the other lines. While the line setting “Suppress if all Zero” can hide the value lines, this allows the user to also hide label lines.. *Financial Model only*

Editing Revenue Summary

MM...	Ref.	Line label	Formula-forecast	Hide if selected line is all zero
	A		Place Holder for Entity Description	
	B	**Electric Revenue**	Label Only	I:[Revenue - Total Electric]
	C	Revenue by Class:	Label Only	I:[Revenue - Total Electric]
	D	Residential	Rollup with Association and Filter(Electric Revenue Schedules,AD:[Total Revenue],Planning Entity,Electric Revenue Class,Residential)	I:[Revenue - Total Electric]
	E	Commercial	Rollup with Association and Filter(Electric Revenue Schedules,AD:[Total Revenue],Planning Entity,Electric Revenue Class,Commercial)	I:[Revenue - Total Electric]
	F	Industrial	Rollup with Association and Filter(Electric Revenue Schedules,AD:[Total Revenue],Planning Entity,Electric Revenue Class,Industrial)	I:[Revenue - Total Electric]
	G	Street Lighting & Other	Rollup with Association and Filter(Electric Revenue Schedules,AD:[Total Revenue],Planning Entity,Electric Revenue Class,Street Lighting &...	I:[Revenue - Total Electric]
	H	Wholesale	Rollup with Association and Filter(Electric Revenue Schedules,AD:[Total Revenue],Planning Entity,Electric Revenue Class,Wholesale)	I:[Revenue - Total Electric]
	I	Revenue - Total Electric	Sum Down(C:[Revenue by Class:])	I:[Revenue - Total Electric]
	J	Revenue by Type:	Label Only	I:[Revenue - Total Electric]
	K	Energy	Rollup(Electric Revenue Schedules,O:[Energy Revenue - Total])	I:[Revenue - Total Electric]
	L	Demand	Rollup(Electric Revenue Schedules,S:[Demand Revenue - Total])	I:[Revenue - Total Electric]
	M	Fuel	Rollup(Electric Revenue Schedules,V:[Fuel Revenue])	I:[Revenue - Total Electric]
	N	Customer	Rollup(Electric Revenue Schedules,Z:[Customer Revenue])	I:[Revenue - Total Electric]
	O	Other	Rollup(Electric Revenue Schedules,AB:[Other Revenue (Input)])	I:[Revenue - Total Electric]
	P	Revenue - Total Electric	Sum Down(K:[Energy])	I:[Revenue - Total Electric]
	Q	**Gas Revenue**	Comment	X:[Revenue - Total Gas]
	R	Revenue by Type	Label Only	X:[Revenue - Total Gas]
	S	Energy	Rollup(Gas Revenue Schedules,O:[Energy Revenue - Total])	X:[Revenue - Total Gas]
	T	Demand	Rollup(Gas Revenue Schedules,S:[Demand Revenue - Total])	X:[Revenue - Total Gas]
	U	Fuel	Rollup(Gas Revenue Schedules,V:[Fuel Revenue])	X:[Revenue - Total Gas]
	V	Customer	Rollup(Gas Revenue Schedules,Z:[Customer Revenue])	X:[Revenue - Total Gas]
	W	Other	Rollup(Gas Revenue Schedules,AB:[Other Revenue (Input)])	X:[Revenue - Total Gas]
	X	Revenue - Total Gas	Sum Down(S:[Energy])	X:[Revenue - Total Gas]

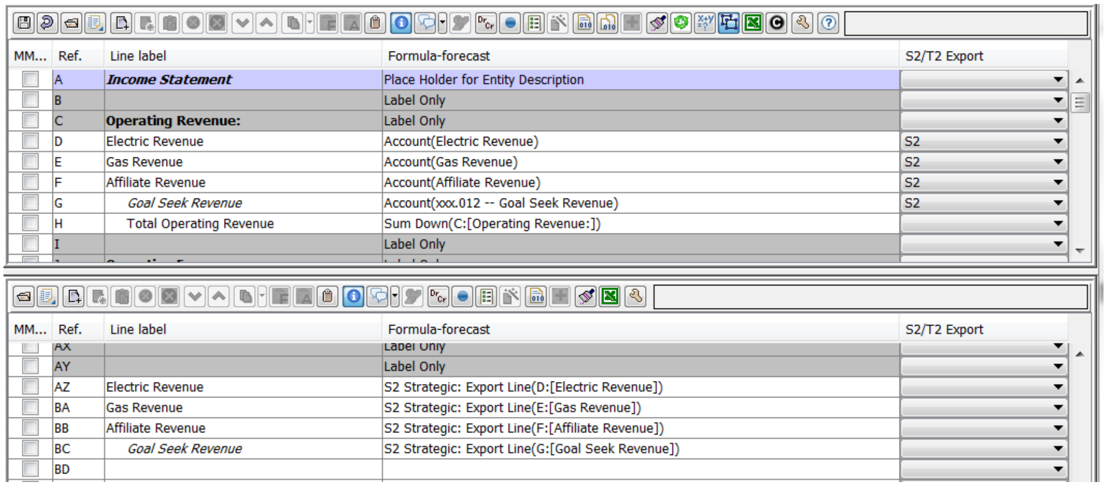
Below is the resulting report - note that Chicago Electric does not show any of the Gas lines or labels and vice versa.

Report: Revenue Summary

Detail Model 2014-2018 Base Plan	Year 2015	Year 2016	Year 2017
Chicago Electric			
Electric Revenue			
Revenue by Class:			
Residential	1,241,984	3,099,641	3,174,701
Commercial	608,831	1,489,592	1,528,783
Industrial	245,740	517,648	534,537
Street Lighting & Other	7,855	17,486	17,944
Wholesale	4,262	10,399	10,585
Revenue - Total Electric	2,108,673	5,134,767	5,266,551
Revenue by Type:			
Energy	1,081,687	2,624,143	2,676,626
Demand	500	1,200	1,200
Fuel	389,636	951,393	999,534
Customer	636,849	1,558,030	1,589,190
Other	0	0	0
Revenue - Total Electric	2,108,673	5,134,767	5,266,551
Chicago Gas			
Gas Revenue			
Revenue by Type			
Energy	3,878	9,994	10,306
Demand	0	0	0
Fuel	54,635	56,427	58,218
Customer	382,356	386,928	391,555
Other	0	0	0
Revenue - Total Gas	440,870	453,348	460,079

S2/T2 Export

This option allows a user to tag lines to be exported using S2 or T2 transfers. This is more efficient than the previous (but still functional) method of having the transfer function on a separate line. *Financial Model only*



MM...	Ref.	Line label	Formula-forecast	S2/T2 Export
	A	***Income Statement***	Place Holder for Entity Description	
	B		Label Only	
	C	**Operating Revenue:**	Label Only	
	D	Electric Revenue	Account(Electric Revenue)	S2
	E	Gas Revenue	Account(Gas Revenue)	S2
	F	Affiliate Revenue	Account(Affiliate Revenue)	S2
	G	*Goal Seek Revenue*	Account(xxx.012 -- Goal Seek Revenue)	S2
	H	Total Operating Revenue	Sum Down(C:[Operating Revenue:])	
	I		Label Only	

MM...	Ref.	Line label	Formula-forecast	S2/T2 Export
	AX		Label Only	
	AY		Label Only	
	AZ	Electric Revenue	S2 Strategic: Export Line(D:[Electric Revenue])	
	BA	Gas Revenue	S2 Strategic: Export Line(E:[Gas Revenue])	
	BB	Affiliate Revenue	S2 Strategic: Export Line(F:[Affiliate Revenue])	
	BC	*Goal Seek Revenue*	S2 Strategic: Export Line(G:[Goal Seek Revenue])	
	BD			

Post: No Zero-Suppress

This option prevents a calculation from if-ing away a posting because of a missing entity value on a line. When this option is turned on, postings will only succeed if the account key has all populated values. *Multidimensional and Customer Revenue only*

Visible (B2ii Schedules)

This controls line visibility on multidimensional reports that are created on instruction sets. Alternately, visibility can be set through the Filter setting on Pivot Reports. Note - the Visibility line usage settings are applicable only to Financial Model reports. *Multidimensional and Customer Revenue only*

Carry forward last year's input

This setting is used on Input lines. If no input amount is found, it takes the value from the prior year, same month. This can be a fail-safe in that it can provide values if they are accidentally not entered in the forecast period. Note that all months in the year need to be populated. *Financial Model only*

M...	Ref.	Line label	Formula-forecast	Carry forward last year's input
	A	***Electric Revenue***	Place Holder for Entity Description	No
	B		Label Only	No
	C	Sales - Block 1	Input()	No
	D	Sales - Block 2	Input()	No
	E	Sales - Block 3	Input()	No
	F	Sales - Total	Sum Down(C:[Sales - Block 1])	No
	G		Label Only	No
	H	Rate Per Unit - Block 1	Input()	Yes
	I	Rate Per Unit - Block 2	Input()	Yes
	J	Rate Per Unit - Block 3	Input()	Yes
	K		Label Only	No

Data was entered for 2016, but not for 2017

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Electric Revenue Schedules	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017
2016 - 2020 Base Plan																								
H:[Rate Per Unit - Block 1]																								
Chicago Electric - Commercial IL	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5												
Chicago Electric - Industrial IL	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5												
Chicago Electric - Residential IL	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5												

Note that 2017 and beyond have values, as a result of the line setting.

Drilldown H:[Rate Per Unit - Block 1] - Chicago Electric - Residential IL (Jan/2017)

Input Pattern, value from 1/2016

Case	Type	Value	Winner	Last Updated By
2016 - 2020 Base Plan	Overlay	7.500	0.075	
Demonstrate Model Concepts	Overlay		0.075	
Data from Budget System	Overlay		0.075	
Cut O&M	Incremental		0.075	

Report: Electric Revenue Schedules

Detail Model 2016-2020 Base Plan - Cut O&M	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017
Chicago Electric - Residential IL							
Sales - Block 1	436,080	519,942	682,074	798,362	620,690	598,772	424,843
Sales - Block 2	348,864	415,954	545,659	638,690	524,638	479,017	339,874
Sales - Block 3	174,432	207,977	272,830	319,345	262,319	239,509	169,937
Sales - Total	959,377	1,143,872	1,500,564	1,756,397	1,407,647	1,317,298	934,654
Rate Per Unit - Block 1	0.075	0.075	0.075	0.075	0.075	0.075	0.075
Rate Per Unit - Block 2	0.060	0.060	0.060	0.060	0.060	0.060	0.060
Rate Per Unit - Block 3	0.050	0.050	0.050	0.050	0.050	0.050	0.050

Recalculate on Display (B2ii Schedules)

If a line is flagged to recalc on display, total columns will now recalculate based on calc-editor logic. *Multidimensional and Customer Revenue only*

Show in 'Constant' column

Used in conjunction with the Constant report column option. See Constant report column option, that looks across the row, and if all of the values are the same, and non-zero, reports the value in the constant column, and nothing in the other columns. This option is used to tag lines not to show in the constant column. *Financial Model only.*

In the example below, if all lines are left as Yes (the Default) in the Show in Constant Column, some of the data values show up in the Constant Column (because they do not change during the period of the report) when they are more appropriately shown in the monthly grid.

Detail Model 2016-2020 Base Plan - Cut O&M		Jan 2016	Feb 2016	Mar 2016	Apr 2016
CHI 5.5% FMB due Nov 1, 2035					
Planning Entity	Chicago El...				
New Issue Principal	$75,000				
Variable Interest Rate		0.00%	0.00%	0.00%	0.00%
Issue Date YYYYMM	Nov 2010				
New Issue Cost Percent		0.0000%	0.0000%	0.0000%	0.0000%
Issue Day (1-30)	1				
Year	2016				
Retire Date YYYYMM	Nov 2035				
Retire Day (1-30)	1				
Sink Day (1-30)		0	0	0	0
Payment Month	5				
Months between payments	6				
Payment month (1=YES)		0	0	0	0
Beginning Balance:					
Beginning Principal Outstanding	220,000				
Beginning Unamortized Issue Cost		681	678	676	673
Beginning Unamortized Discount (Premium)		681	678	676	673
Beginning Interest Payable		1,983.056	2,991.389	3,999.722	5,008.056
Beginning Principal Due within 12 Months		0	0	0	0
Beginning Principal Due Long-Term	220,000				
BeginningUnamortized Reacquisition Loss (Gain)		0	0	0	0
Current Period Activity:					
New Issue - Principal		0	0	0	0

When these lines are tagged to No, the report is more meaningful.

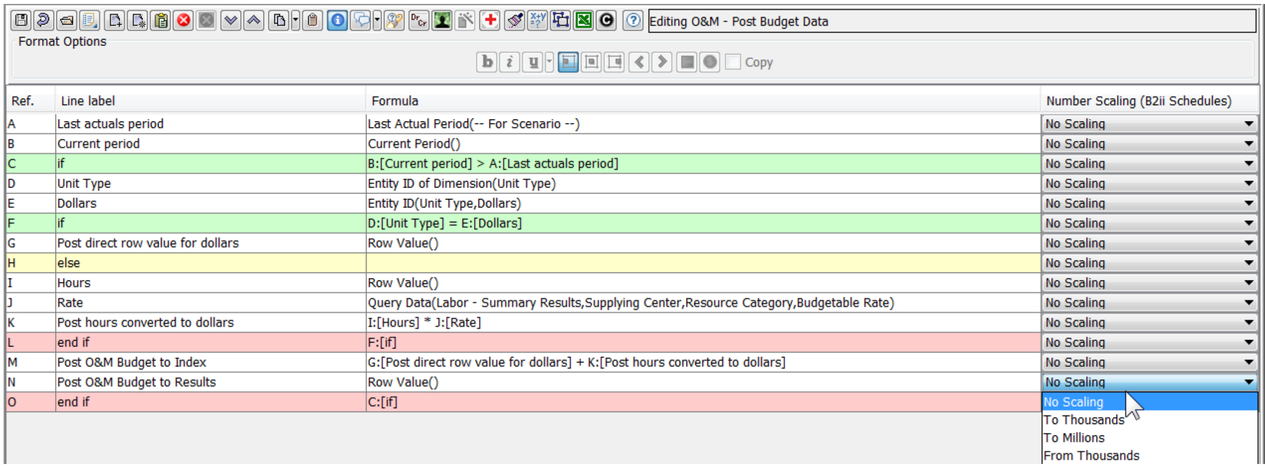
M...	Ref.	Line label	Formula-forecast	Show in 'Constant' column
	AL		Label Only	Yes
	AM	Beginning Balance:	Label Only	Yes
	AN	Beginning Principal Outstanding	Previous(DQ:[Ending Principal Outstanding])	No
	AO	Beginning Unamortized Issue...	Previous(DR:[Ending Unamortized Issue Cost])	No
	AP	Beginning Unamortized Disco...	Previous(DS:[Ending Unamortized Discount (Premium)])	No
	AQ	Beginning Interest Payable	Previous(DT:[Ending Interest Payable])	No
	AR	Beginning Principal Due withi...	Previous(DU:[Principal Due within 12 Months])	No
	AS	Beginning Principal Due Long...	Previous(DV:[Principal Due Long-Term])	No
	AT	BeginningUnamortized Reacq...	Previous(DW:[Unamortized Reacquisition Loss (Gain)])	No
	AU		Label Only	Yes
	AV	Current Period Activity:	Label Only	Yes

Report: Bonds - Detailed Model

Detail Model 2016-2020 Base Plan - Cut O&M		Jan 2016	Feb 2016	Mar 2016
CHI 5.00% FMB Due July 2, 2042 (Planned)				
Planning Entity	Chicago Electric			
New Issue Principal	$400,000			
Variable Interest Rate		0.00%	0.00%	0.00%
Issue Date YYYYMM	Mar 2015			
New Issue Cost Percent		0.0000%	0.0000%	0.0000%
Issue Day (1-30)	2			
Year	2016			
Retire Date YYYYMM	Jun 2042			
Retire Day (1-30)	1			
Sink Day (1-30)		0	0	0
Payment Month	1			
Months between payments	6			
Payment month (1=YES)		1	0	0
Beginning Balance:				
Beginning Principal Outstanding		400,000	400,000	400,000
Beginning Unamortized Issue Cost		5,817	5,799	5,780
Beginning Unamortized Discount (Premium)		5,817	5,799	5,780
Beginning Interest Payable		9,944.444	1,611.111	3,277.778
Beginning Principal Due within 12 Months		0	0	0
Beginning Principal Due Long-Term		400,000	400,000	400,000
BeginningUnamortized Reacquisition Loss (Gain)		0	0	0

Number Scaling (B2ii Schedules)

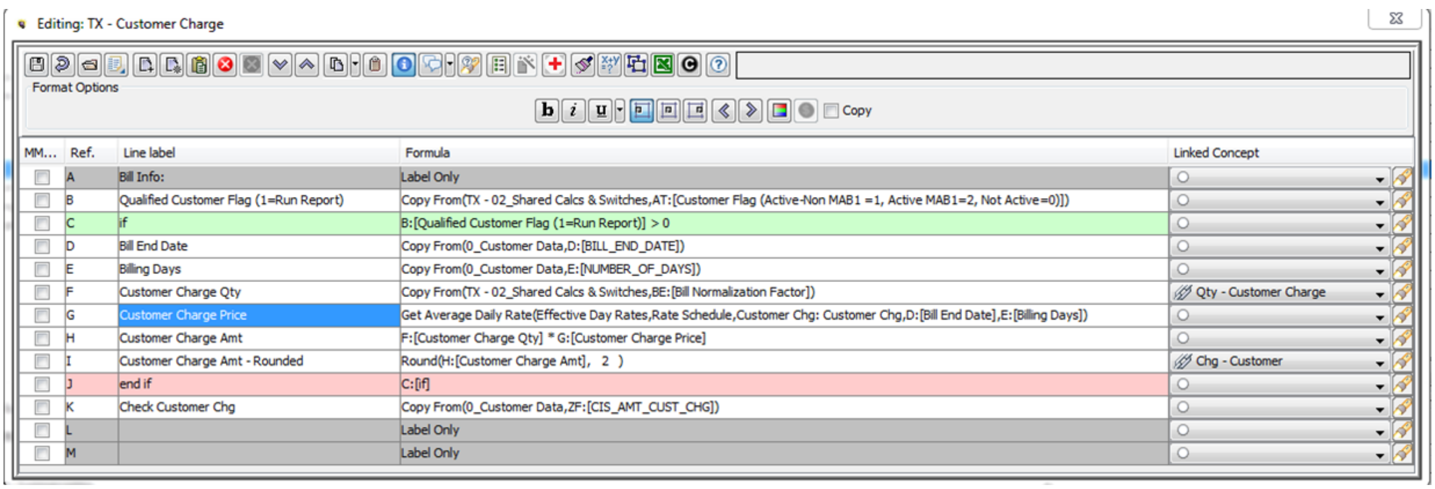
Allows the user to define number scaling in Pivot Reports on a line by line basis. *Multidimensional and Customer Revenue only*


Editing O&M - Post Budget Data
Format Options
Copy

Ref.	Line label	Formula	Number Scaling (B2ii Schedules)
A	Last actuals period	Last Actual Period(-- For Scenario --)	No Scaling
B	Current period	Current Period()	No Scaling
C	if	B:[Current period] > A:[Last actuals period]	No Scaling
D	Unit Type	Entity ID of Dimension(Unit Type)	No Scaling
E	Dollars	Entity ID(Unit Type,Dollars)	No Scaling
F	if	D:[Unit Type] = E:[Dollars]	No Scaling
G	Post direct row value for dollars	Row Value()	No Scaling
H	else		No Scaling
I	Hours	Row Value()	No Scaling
J	Rate	Query Data(Labor - Summary Results,Supplying Center,Resource Category,Budgetable Rate)	No Scaling
K	Post hours converted to dollars	I:[Hours] * J:[Rate]	No Scaling
L	end if	F:[if]	No Scaling
M	Post O&M Budget to Index	G:[Post direct row value for dollars] + K:[Post hours converted to dollars]	No Scaling
N	Post O&M Budget to Results	Row Value()	No Scaling
O	end if	C:[if]	No Scaling To Thousands To Millions From Thousands

Linked Concept

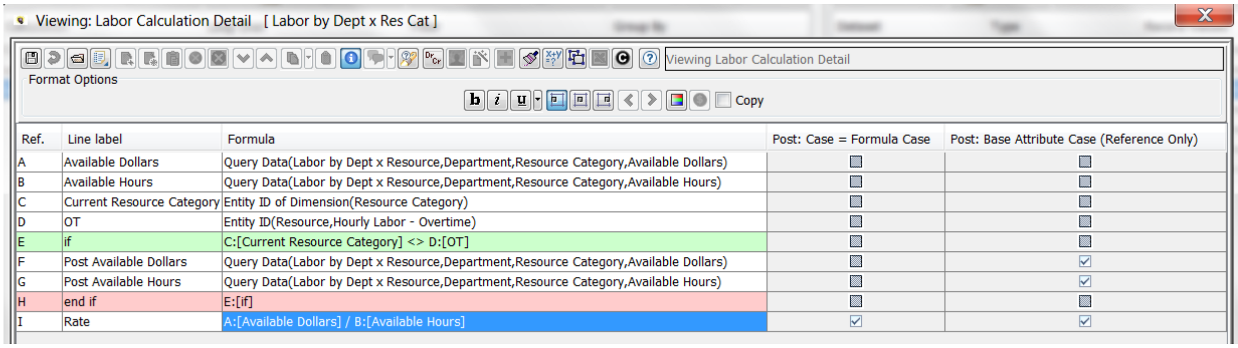
Allows the user to relate a line in an instruction set to a specific Linked Concept. *Customer Revenue only.*


Editing: TX - Customer Charge
Format Options
Copy

MM...	Ref.	Line label	Formula	Linked Concept
	A	Bill Info:	Label Only	
	B	Qualified Customer Flag (1=Run Report)	Copy From(TX - 02_Shared Calcs & Switches,AT:[Customer Flag (Active-Non MAB1 =1, Active MAB1=2, Not Active=0)])	
	C	if	B:[Qualified Customer Flag (1=Run Report)] > 0	
	D	Bill End Date	Copy From(0_Customer Data,D:[BILL_END_DATE])	
	E	Billing Days	Copy From(0_Customer Data,E:[NUMBER_OF_DAYS])	
	F	Customer Charge Qty	Copy From(TX - 02_Shared Calcs & Switches,BE:[Bill Normalization Factor])	Qty - Customer Charge
	G	Customer Charge Price	Get Average Daily Rate(Effective Day Rates,Rate Schedule,Customer Chg: Customer Chg,D:[Bill End Date],E:[Billing Days])	
	H	Customer Charge Amt	F:[Customer Charge Qty] * G:[Customer Charge Price]	
	I	Customer Charge Amt - Rounded	Round(H:[Customer Charge Amt], 2)	Chg - Customer
	J	end if	C:[if]	
	K	Check Customer Chg	Copy From(0_Customer Data,ZF:[CIS_AMT_CUST_CHG])	
	L		Label Only	
	M		Label Only	

Post: Base Case (Reference Only)

This column shows the Post indicator as stored in the Base Case when the Planner Property is set to store the Post flag in the Formula Case, or vice versa. This is a read-only column, and is intended as a short-term convenience for implementations that are transition from the storing the Post the Base Case to the Formula Case. This can assist with correction of any errors that may have happened during the migration process of the Post attributes between Cases. *Multidimensional only*



Ref.	Line label	Formula	Post: Case = Formula Case	Post: Base Attribute Case (Reference Only)
A	Available Dollars	Query Data(Labor by Dept x Resource,Department,Resource Category,Available Dollars)	☐	☐
B	Available Hours	Query Data(Labor by Dept x Resource,Department,Resource Category,Available Hours)	☐	☐
C	Current Resource Category	Entity ID of Dimension(Resource Category)	☐	☐
D	OT	Entity ID(Resource,Hourly Labor - Overtime)	☐	☐
E	if	C:[Current Resource Category] <> D:[OT]	☐	☐
F	Post Available Dollars	Query Data(Labor by Dept x Resource,Department,Resource Category,Available Dollars)	☐	☑
G	Post Available Hours	Query Data(Labor by Dept x Resource,Department,Resource Category,Available Hours)	☐	☑
H	end if	E:[if]	☐	☐
I	Rate	A:[Available Dollars] / B:[Available Hours]	☑	☑

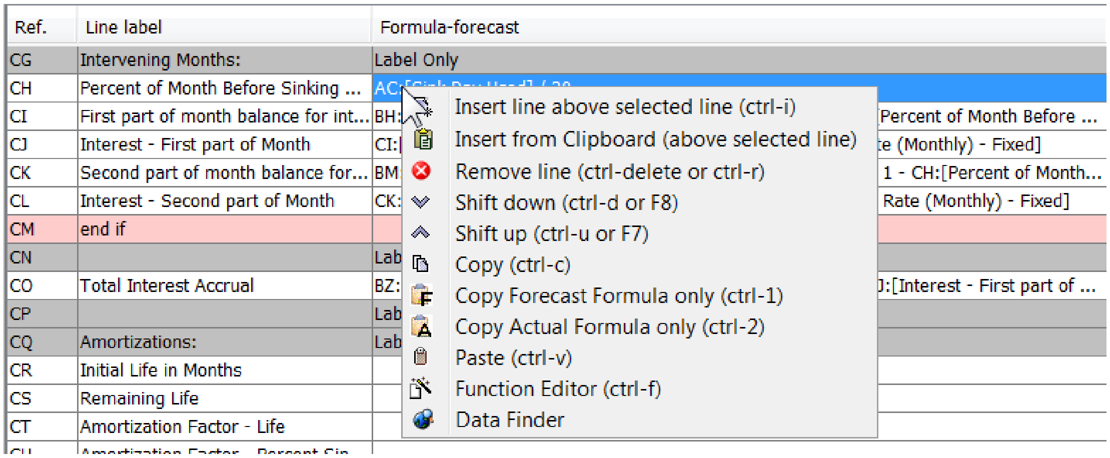
Line Actions

In building calculations in the Calculation Editor, the toolset includes a number of tools that users may employ related to a specific line. As examples, these allow users to add lines, delete lines or move lines around in a calculation, or to copy lines or formulas within a calculation.

The table below lays out the Control Buttons and shortcut keys for the Line Actions. Following the table are detailed descriptions of each of the Line Actions.

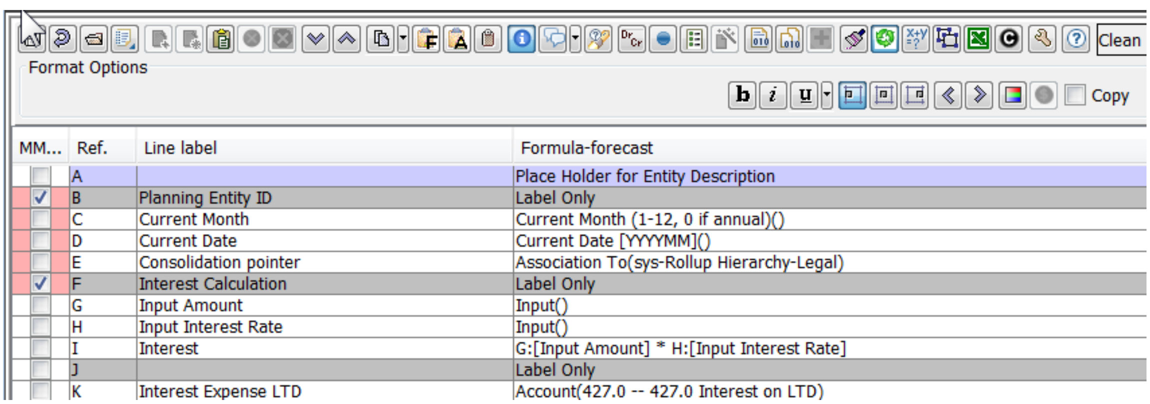
Icon	Action	Description	Shortcut key
	Add Line	Adds a blank line at the bottom of the report Calculation Grid.	CTRL-A
	Insert Line	Inserts a blank line above the selected line.	CTRL-I
	insert from Clipboard	Inserts the contents of the clipboard above the selected line.	
	Delete Line	Removes the selected line(s) (or block remove, if range checked in MM column	CTRL-R OR CTRL-DELETE
	Delete section of lines	Removes a block of selected lines.	
	Move Down	Moves the selected line(s) down one line.	CTRL-D OR F8
	Move Up	Moves the selected line(s) up one line.	CTRL-U OR F7
	Copy	Copies selected line(s), or a block of lines, to the clipboard. The down arrow to the right of this icon enables copying formulas only or copying Postings only (Multidim).	CTRL-C CTRL-2 (POSTING)
	Copy Forecast Formula	Copies only the Forecast formula from the selected line to the clipboard	CTRL-1
	Copy Actual Formula	Copies only the Actual formula from the selected line to the clipboard	CTRL-2
	Paste	Pastes the line (or formula as applicable) from the clipboard to the selected line.	CTRL-V
	Make line comment	Makes selected line a comment	Ctrl-/
	Make line label	Makes the selected line a label	Ctrl-'
	Assign Postings	Opens the Define Postings screen.	CTRL-P
	Function Editor	Opens the Function Editor.	CTRL-F
	Line Trace	Opens the Line Trace dialog box for the selected line	
None	Make Selected Line Label	Makes the selected line a Label	

There are also right click options for some of the more commonly used line functions. Select a line and right click on it to bring up these options.



Selecting Lines

When using the Calculation Editor, the user can select an individual lines by highlighting it. To select multiple lines, use the MM – Mark Lines for Block Move checkbox (the first column). Note that to select a range, select the first line and the last line (as opposed to individually selecting the desired lines.)



Note that while a line range is selected, various of the action buttons are disabled, so once the user has finished the action with that range (e.g., Move up or Down), it should be deselected.

Add Line

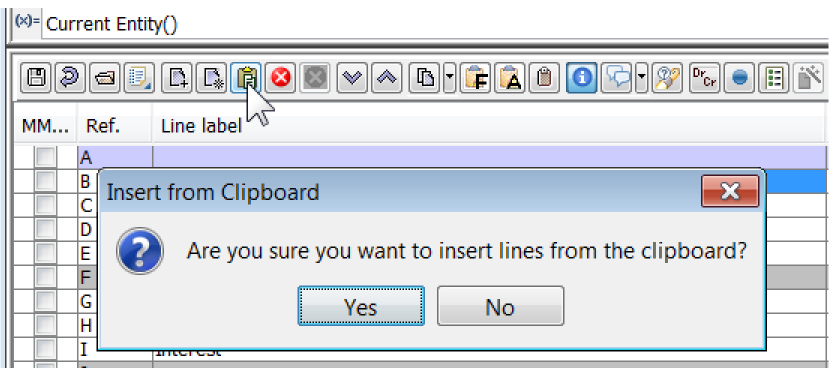
Adds a blank line to the end of the report. The line settings will default to Formula, and Always Show. The new line will take the Month to Annual and Annual to Month settings of the line above.

Insert Line

Inserts a blank line above the currently selected line. The line settings will default to Formula, Always Show, Sum of Months, and whatever the user has selected for the default for Annual to Month (Dollars With Actuals or Dollars Without Actuals)

Insert from Clipboard

Inserts the contents of the clipboard above the selected line. This allows the user to take the line labels of an existing Excel report and bring it into the calculation. The user is first presented with a confirmation dialog (in case the user accidentally checked the button). Note that this will insert whatever is currently in the clipboard, so the user should be sure that it is the selected set of line labels.



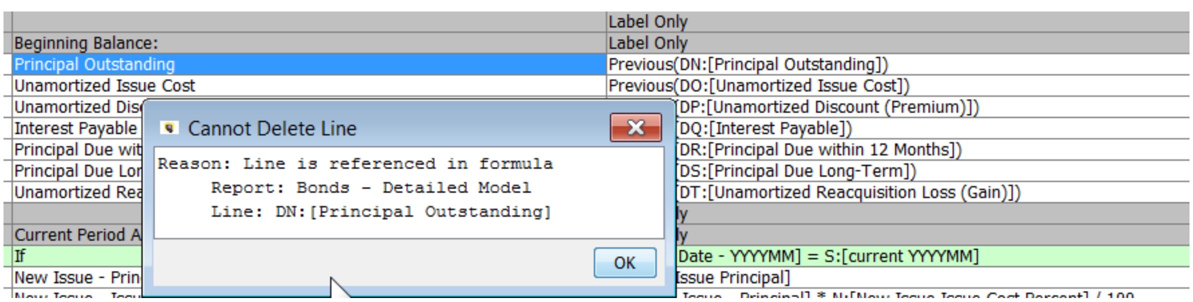
Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Planning Entity ID	Current Entity()
C	Current Month	Current Month (1-12, 0 if annual)()
D	Current Date	Current Date [YYYYMM]()
E	Fuel Report	Label Only
F	======== Electric Utility ========	
G	Generation Coal Cost - Spot	
H	Generation Coal Cost - Contract	
I	Generation Gas Cost	
J	Generation Hydro Cost	
K	Generation Nuclear Cost	
L	Total Generation Cost	
M		
N	Purchased Power Energy Cost	
O	Other Purchased Power Cost	
P	Purchased Power Demand Cost	
Q	Total Purchased Power Cost	
R		
S	Fuel Handling & Ash Disposal	
T	SO2 Allowances	
U	Other Fuel Cost	
V	Total Other Fuel Cost	
W		
X	Total Generation & Purchased Power Cost	

Delete Line

Deletes the selected line.

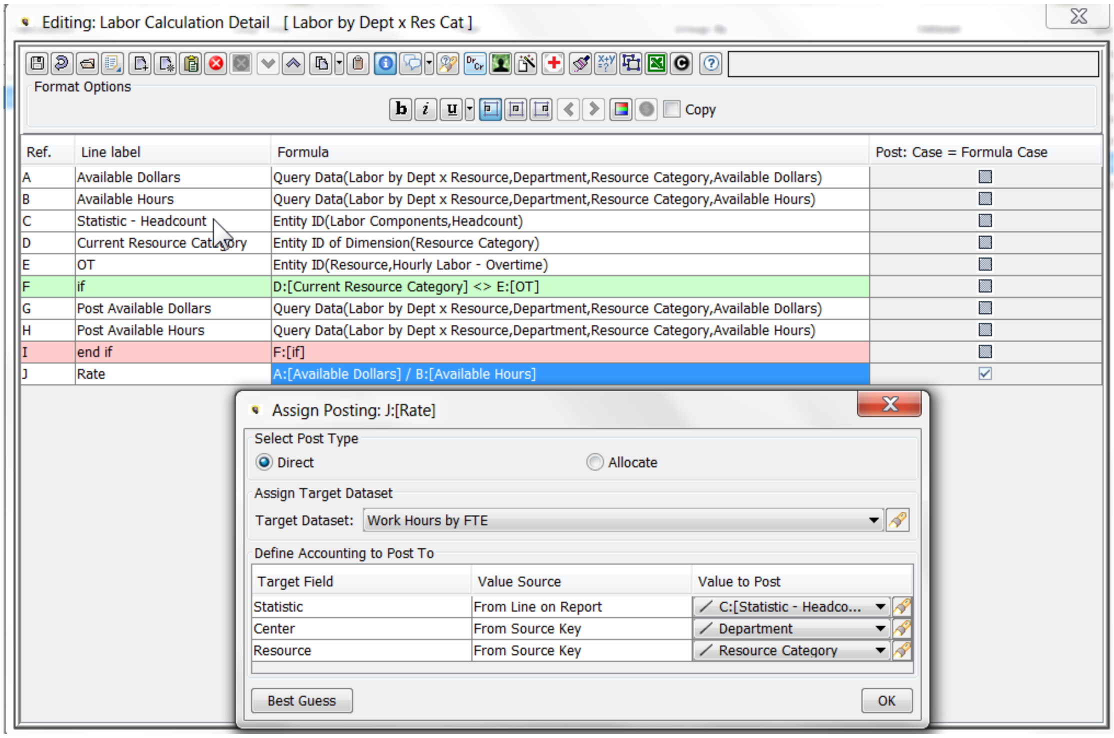
Line References

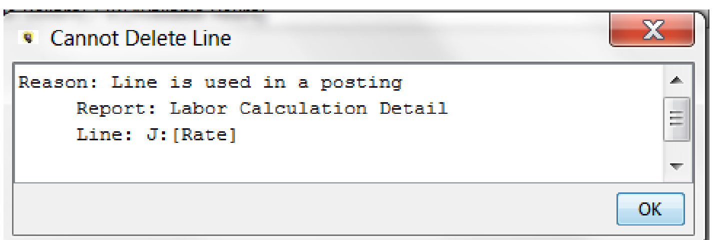
If the line selected for deletion is used elsewhere in the calculation, or referenced in another calculation, the line cannot be deleted. The user will be presented with a warning dialog.



Lines with Postings.

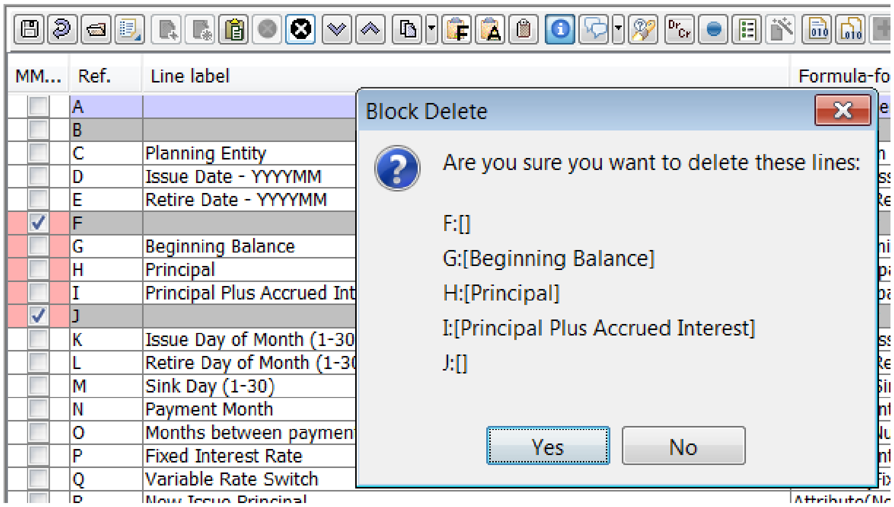
In Financial Model calculations, lines with Postings can be deleted, as long as they are not references elsewhere (see above). However, in Multidimensional calculations, a line cannot be deleted if it is referenced in a posting. See below.





Delete section of lines

This button all allows the user to delete a range of lines. The user selects the first and last lines in the range to be deleted. If the lines in the range are OK to be deleted, the icon will turn black. If not, the icon will not be enabled. When the user selects the active icon, there will be a confirm dialog. Below is a valid deletion.



Move Down

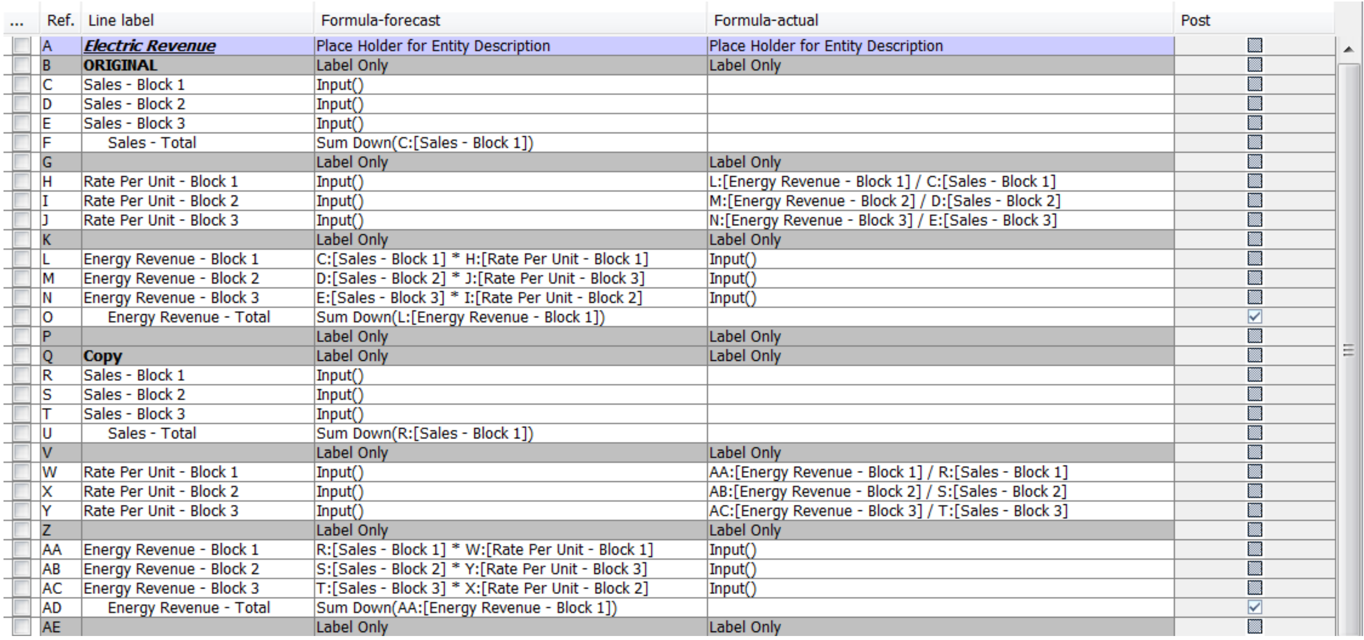
Moves the selected line (or lines) down one line. See Selecting Lines for how to select multiple lines.

Move Up

Moves the selected line (or lines) up one line. See Selecting Lines for how to select multiple lines.

Copy

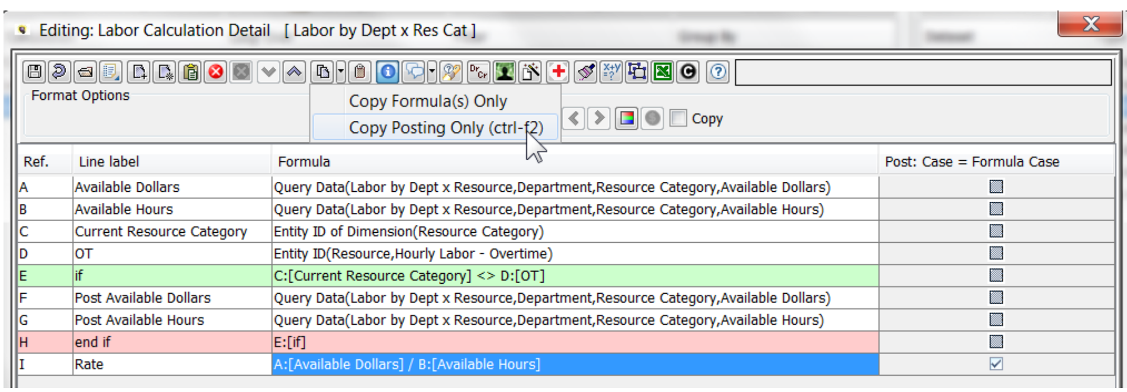
Copies the current line (or lines) to the clipboard. If a range of lines is copied and pasted, all formulas internal to that range maintain their internal references. Note the ranges below – the Original and Copy.



Ref.	Line label	Formula-forecast	Formula-actual	Post
A	*Electric Revenue*	Place Holder for Entity Description	Place Holder for Entity Description	
B	**ORIGINAL**	Label Only	Label Only	
C	Sales - Block 1	Input()		
D	Sales - Block 2	Input()		
E	Sales - Block 3	Input()		
F	Sales - Total	Sum Down(C:[Sales - Block 1])		
G		Label Only	Label Only	
H	Rate Per Unit - Block 1	Input()	L:[Energy Revenue - Block 1] / C:[Sales - Block 1]	
I	Rate Per Unit - Block 2	Input()	M:[Energy Revenue - Block 2] / D:[Sales - Block 2]	
J	Rate Per Unit - Block 3	Input()	N:[Energy Revenue - Block 3] / E:[Sales - Block 3]	
K		Label Only	Label Only	
L	Energy Revenue - Block 1	C:[Sales - Block 1] * H:[Rate Per Unit - Block 1]	Input()	
M	Energy Revenue - Block 2	D:[Sales - Block 2] * J:[Rate Per Unit - Block 3]	Input()	
N	Energy Revenue - Block 3	E:[Sales - Block 3] * I:[Rate Per Unit - Block 2]	Input()	
O	Energy Revenue - Total	Sum Down(L:[Energy Revenue - Block 1])		✓
P		Label Only	Label Only	
Q	**Copy**	Label Only	Label Only	
R	Sales - Block 1	Input()		
S	Sales - Block 2	Input()		
T	Sales - Block 3	Input()		
U	Sales - Total	Sum Down(R:[Sales - Block 1])		
V		Label Only	Label Only	
W	Rate Per Unit - Block 1	Input()	AA:[Energy Revenue - Block 1] / R:[Sales - Block 1]	
X	Rate Per Unit - Block 2	Input()	AB:[Energy Revenue - Block 2] / S:[Sales - Block 2]	
Y	Rate Per Unit - Block 3	Input()	AC:[Energy Revenue - Block 3] / T:[Sales - Block 3]	
Z		Label Only	Label Only	
AA	Energy Revenue - Block 1	R:[Sales - Block 1] * W:[Rate Per Unit - Block 1]	Input()	
AB	Energy Revenue - Block 2	S:[Sales - Block 2] * Y:[Rate Per Unit - Block 3]	Input()	
AC	Energy Revenue - Block 3	T:[Sales - Block 3] * X:[Rate Per Unit - Block 2]	Input()	
AD	Energy Revenue - Total	Sum Down(AA:[Energy Revenue - Block 1])		✓
AE		Label Only	Label Only	

Notes – if a copied line had postings associated with it, the new line will have the same postings. This is important to keep in mind when copying lines. This applies to both Financial Model and Multidimensional calculations.

In Multidimensional calculations, the dropdown arrow has an additional option that allows the user to copy the postings only. These can then be pasted to another line.



Ref.	Line label	Formula	Post: Case = Formula Case
A	Available Dollars	Query Data(Labor by Dept x Resource,Department,Resource Category,Available Dollars)	
B	Available Hours	Query Data(Labor by Dept x Resource,Department,Resource Category,Available Hours)	
C	Current Resource Category	Entity ID of Dimension(Resource Category)	
D	OT	Entity ID(Resource,Hourly Labor - Overtime)	
E	if	C:[Current Resource Category] <> D:[OT]	
F	Post Available Dollars	Query Data(Labor by Dept x Resource,Department,Resource Category,Available Dollars)	
G	Post Available Hours	Query Data(Labor by Dept x Resource,Department,Resource Category,Available Hours)	
H	end if	E:[if]	
I	Rate	A:[Available Dollars] / B:[Available Hours]	✓

Copy Forecast Formula

Copies the Forecast formula of the selected line to the clipboard. It can then be pasted to another line, either in the current report or in another report. This allows the user to copy only the Forecast formula (copy line also copies the label and postings).

Copy Actual Formula

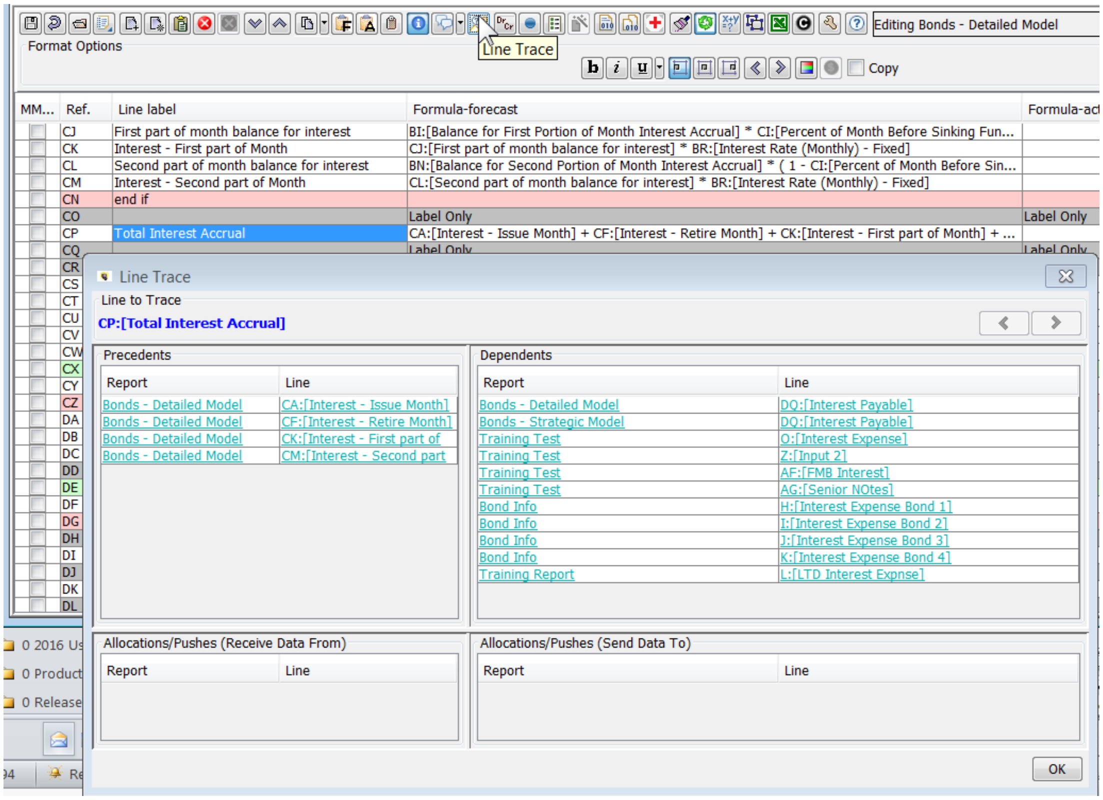
Copies the Actuals formula of the selected line to the clipboard. It can then be pasted to another line, either in the current report or in another report. This allows the user to copy only the Actuals formula (copy line also copies the label and postings).

Paste

Pastes the contents of the clipboard into the selected line or above it. Note that this is dependent upon what the user had copied (an entire line, or just the Forecast Formula or Actual Formula). If the user had selected a range of lines and hit Copy, this would paste those lines above the selected line.

Line Trace

This button allows the user to see where a given line is used elsewhere, both in the current report and in other reports. The Trace Dependencies dialog lists both Precedents (lines that the current line references) and Dependents (lines that reference the selected line). The dialog also lists references through Target of Allocations and Push from Report to Report. The user can click on a highlighted reference and jump to that report. Financial Model only.

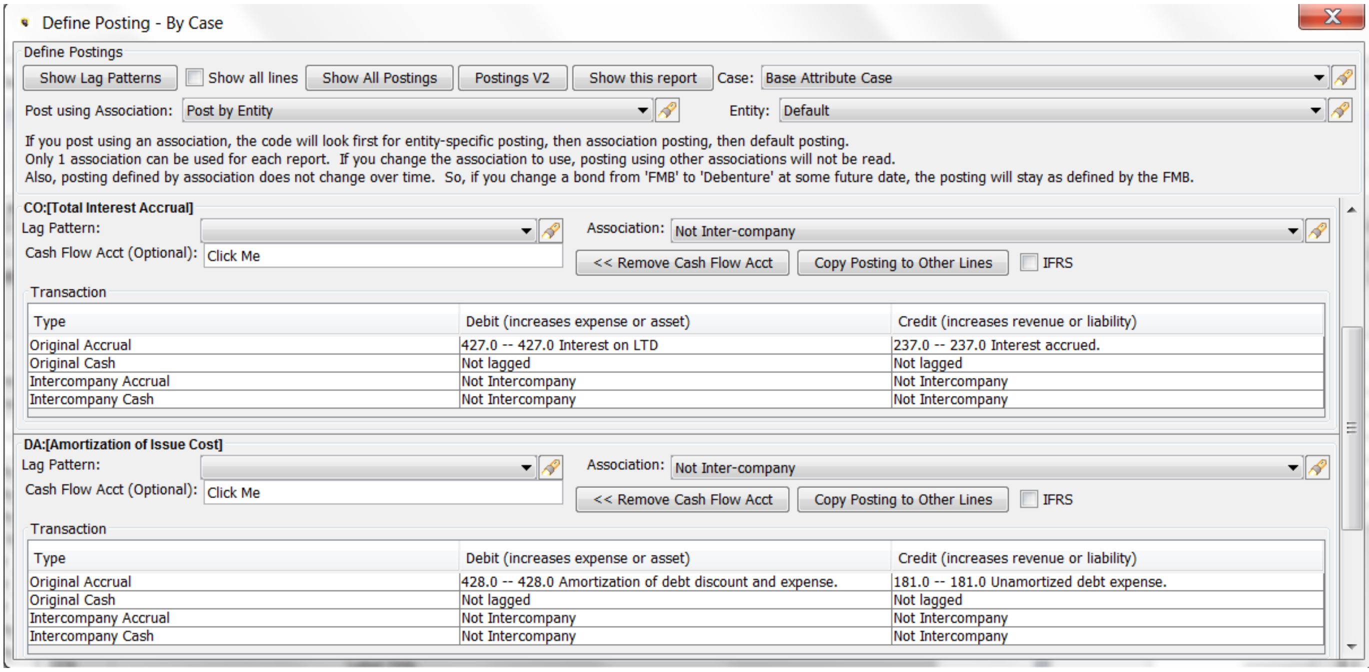


Assign Postings

This button will bring up the appropriate Assign Postings dialog depending upon the calculation type. See Postings – Financial Model or Postings - Multidimensional for further information on Postings.

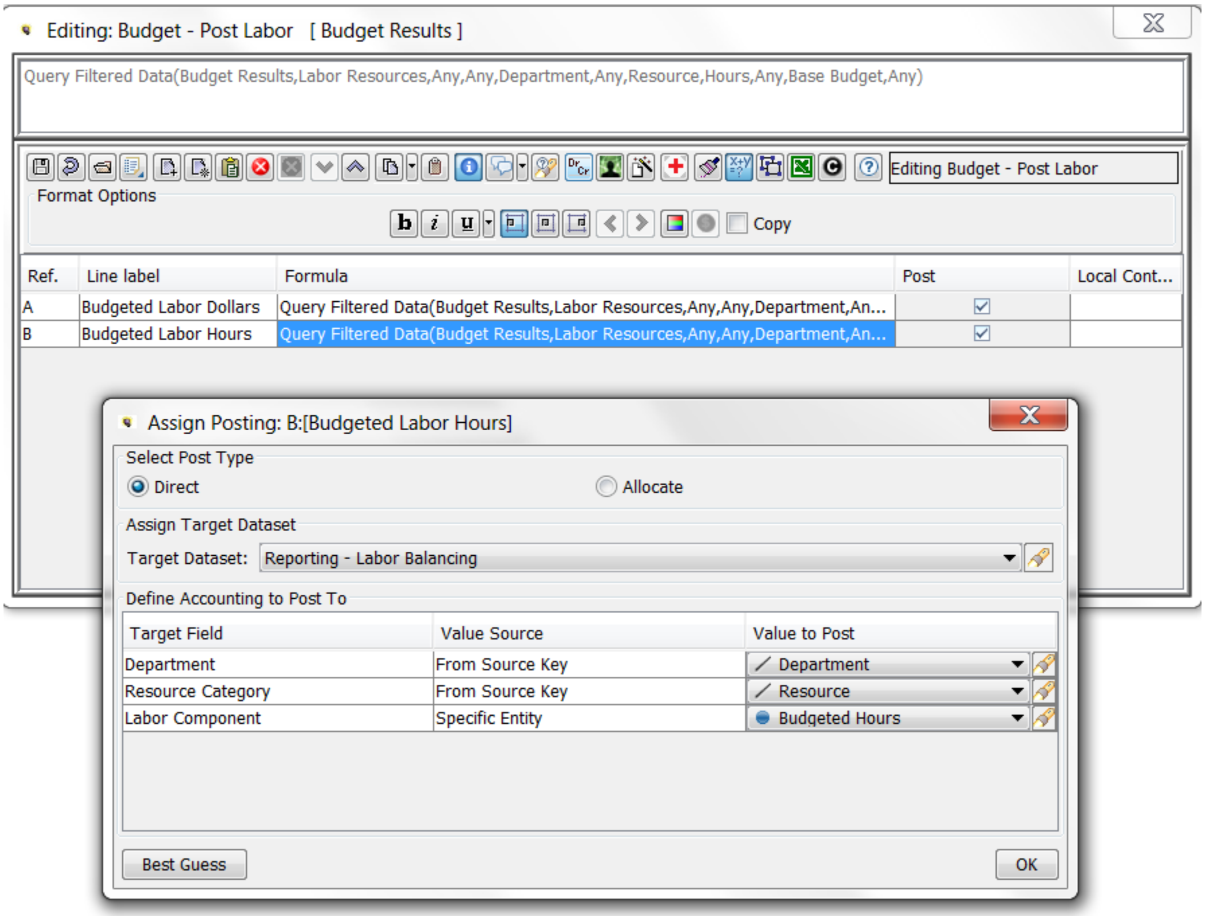
Financial Model

In Financial Model calculations, the posting dialog will show all lined that have been tagged to post using the Post checkbox. If the user has selected a specific posted line, the dialog will open up selected to that line.

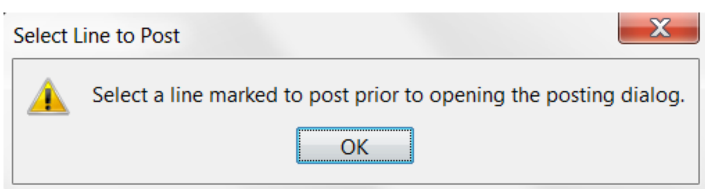


Multidimensional

In Multidimensional calculations, the user needs to first select a line that has been tagged to post using the Post checkbox. The multidimensional posting dialog shows the posting only for the selected line.



If the user selects a line for which the Post checkbox has not been checked or they do not select a line, the Posting Dialog will not open, and instead they will get a warning message.



Recover Deleted Line(s)

Allows the use to recover lines that were deleted in previous editing sessions (as long as the Hard Delete Lines menu item has not been run. Note that this recovers lines deleted by any user, not just the current user.

The dialog lists all previously deleted lines – the user selects which line to recover and it will be inserted below the current line. The original formula will also be recovered; however, if the line referenced a line not recovered, the formula may need to be modified.

Recover Deleted Lines - insert below line: Z:[]

Recover Line | Recover Group | Cancel

Select:	Object Id	Line Name	Date Deleted	Next Line Ob...	Next Line Name	Group #	Order in Gr...
☐	30641653	Generation Hydro Cost	2016.05.30-08:03	30638870		1	1
☐	30638875	Bond Balances	2016.05.29-16:39	30638874	Beginning Interes...	2	1
☐	30638879	Ending Interest Payable	2016.01.07-11:22	30638868	13 Month Averag...	3	1
☐	30638883		2016.05.30-08:10	30638882		4	1
☐	30638882		2016.05.30-08:10	30638881		4	2
☐	30638881		2016.05.30-08:10	30638880		4	3
☐	30638880		2016.05.30-08:10	30641652	Generation Gas C...	4	4
☐	30640650	Bond Balances	2016.05.29-16:40	30638874	Beginning Interes...	5	1
☑	30641650	Generation Coal Cost - Spot	2016.05.30-08:11			6	1
☐	30641651	Generation Coal Cost - Contract	2016.05.30-08:11			7	1
☐	30641652	Generation Gas Cost	2016.05.30-08:11			8	1
☐	30638870		2016.05.30-08:10			9	1
☐	30641654	Generation Nuclear Cost	2016.05.30-08:11			10	1
☐	30641655	Total Generation Cost	2016.05.30-08:11			11	1

Before recovering deleted lines

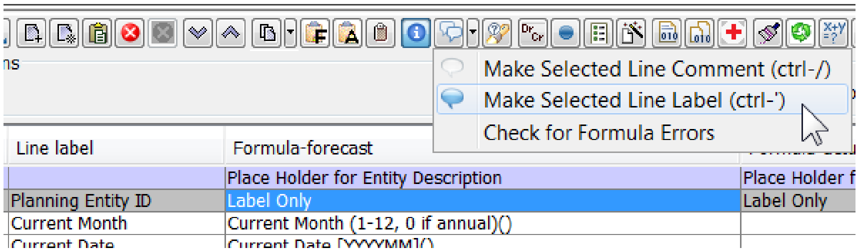
☐	W	Ending Interest Payable	U:[Beginning Interest Payable] + V:[Interest calc]
☐	X		Label Only
☐	Y	13 Month Average - Interest Paya...	13-point Average of Monthly Averages(W:[Ending Interest Payable])
☐	Z		

After recovering selected lines

☐	X		Label Only	L...
☐	Y	13 Month Average - Interest Paya...	13-point Average of Monthly Averages(W:[Ending Interest Payable])	
☐	Z			
☐	AA	Generation Gas Cost	Input()	
☐	AB	Generation Hydro Cost	Input()	
☐	AC	Generation Nuclear Cost	Input()	
☐	AD	Total Generation Cost	AA:[Generation Gas Cost] + AB:[Generation Hydro Cost] + AC:[Generation Nuclear Cost]	
☐	AE			

Make Selected Line Label / Make Selected Line Comment

Makes the selected line a Label or Comment as chosen.

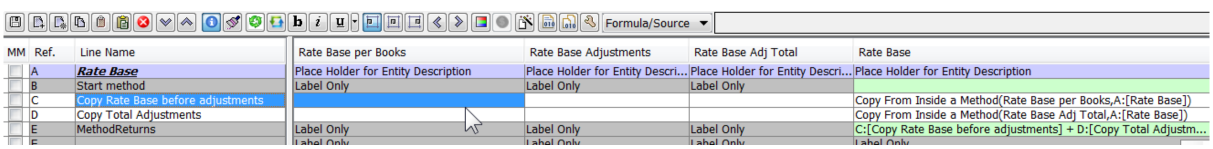


Line Formatting

Users can format calculation lines in the Calculation Editor. Note that in the Financial Model, this is more commonly done in Browse Reports, as the results are immediately visible in the final report view. In the Financial Model, the calculation and the report are one and the same. In Multidimensional instruction sets, formatting can also be done in the View Results dialog. However, this formatting relates only to the actual calculation. Users will more commonly view pivot reports built off datasets – see Pivot Reports.

The line formatting buttons are in a separate panel that can be toggled on and off using the paintbrush control button.

In the Wide Calculation view of the Calculation Editor, the formatting buttons are laid out as part of the Control button panel.



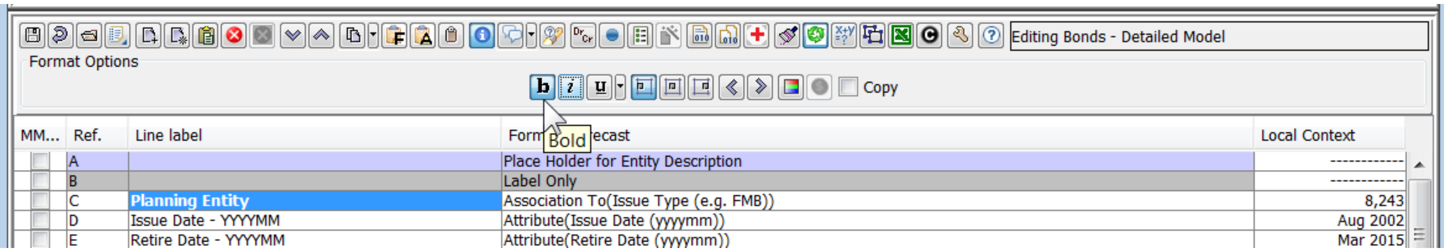
The table below lays out the Control Buttons and shortcut keys for Line Formatting. Following the table are detailed descriptions of each of the formatting options.

Icon	Action	Description
b	Bold	Toggles the contents of the active cell to Bold.
i	Italic	Toggles the contents of the active cell to Italic.
u	Underline	Toggles the contents of the active cell to Underline. The down arrow to the right of this icon enables you to specify the underline or cell border format.
	Align Left	Aligns the contents of the active cell Left.
	Align Center	Aligns the contents of the active cell Center.
	Align Right	Aligns the contents of the active cell Right.
	Indent Left	Indents the contents of the active cell left. Each time the Indent is pressed, the cell contents will be further indented. This can be reversed by Clicking on Indent Right
	Indent Right	Indents the contents of the active cell right. Each time the Indent is pressed, the cell contents will be further indented. This can be reversed by Clicking on Indent left.
	Select Color	Select a color for the active cell or row. Use the color select dialog to choose a color for the active cell or the active line.
	Assign Number Format	Available when a value is selected in the *Local Context* column on the **Calculation Grid**. Select a format option from the drop down list.
	Copy	Use this checkbox to copy all formatting from one line to another.

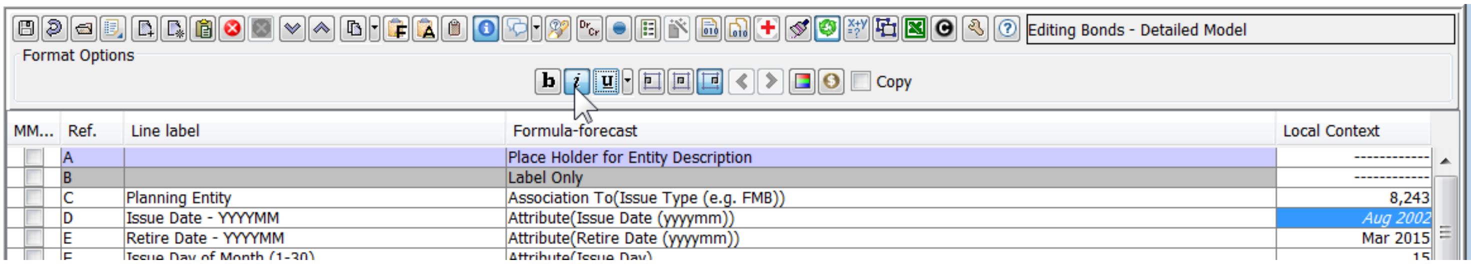
Formatting Lines

To format a line, select it in the Calculation Grid. This will enable the formatting buttons (the Formatting Panel should be activated first).

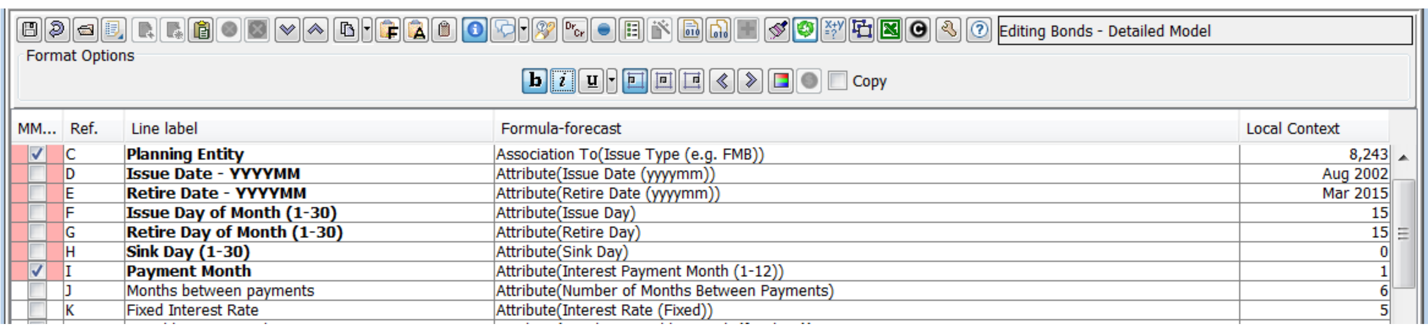
Formatting for line labels is activated by selecting the line.



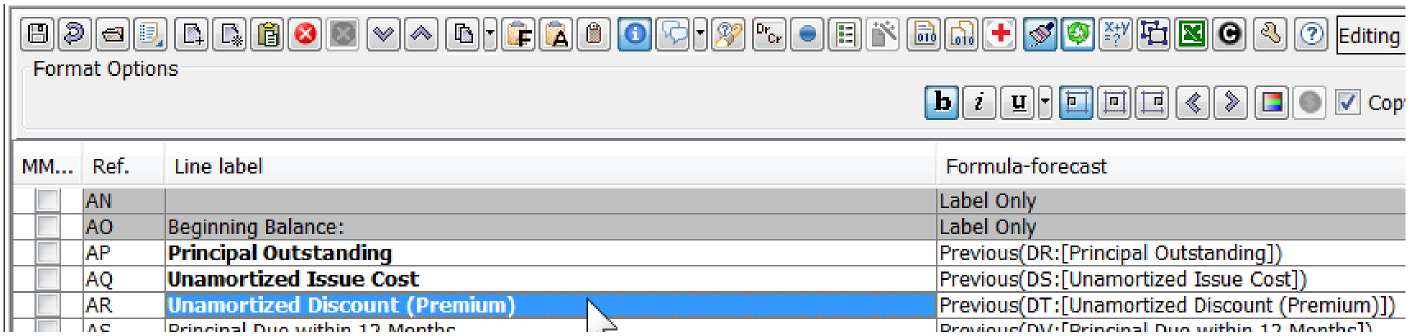
To format the data cells, select the desired line in the Local Context Column. See below.



Note that a range of lines can be formatted all at once. Use the MM checkbox to select a range. The formatting buttons will then format all lines in the range. See below.



To copy a line format from one line to another, select the line with the format to copy, and select the Copy checkbox. Then select the desired line, and the format will be copied to that line. Note that as long as the Copy checkbox is enabled, the format will be copied to each line selected, so once the formatting is complete, unselect the checkbox. This is the same functionality available in Browse Reports.

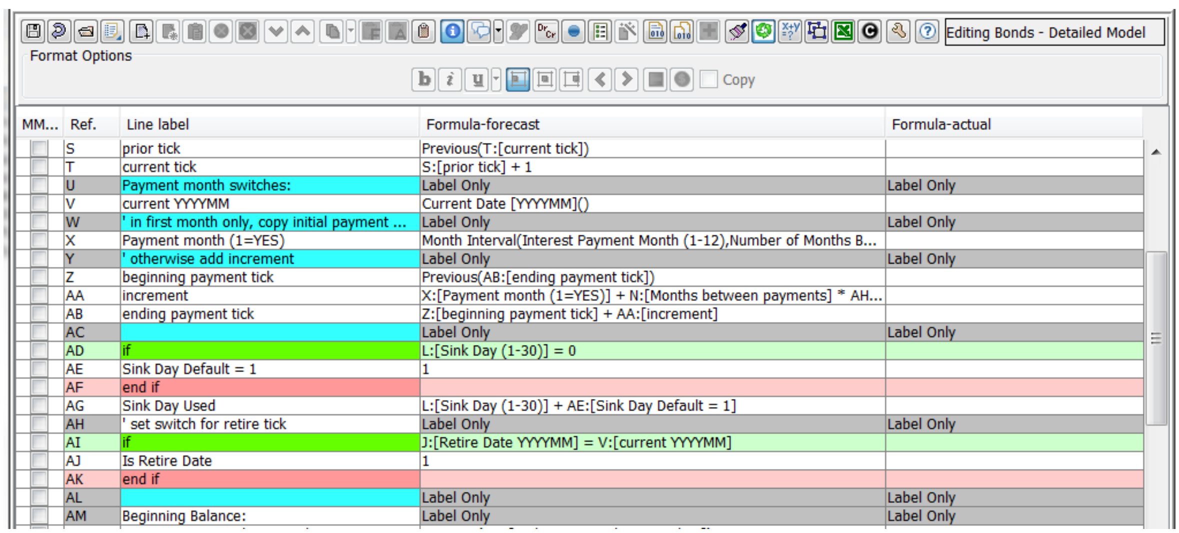


Formatting Special Lines

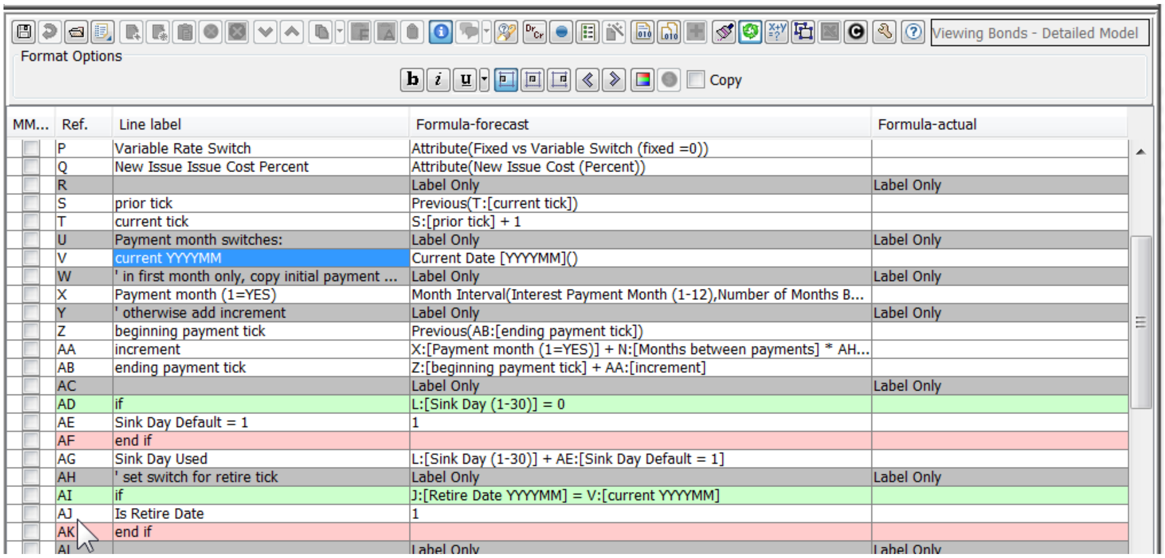
If the user has enabled the User Preference to Enable formatting of 'special lines' on the Calculation Editor, the user can change the format of lines that are Entity Description, Label, If-EndIF, Comment, etc. This allows formatting of "special" lines - without changing the color of ALL special lines. Otherwise, formatting one special line would format all lines of that type.

Note that the formatting is by calculation, so users can format only the reports that they want . Also, formatting is global for all users.

With the User Preference on, the user can reformat the special lines.



With the User Preference off, the Calculation Editor will display the default.



MM...	Ref.	Line label	Formula-forecast	Formula-actual
	P	Variable Rate Switch	Attribute(Fixed vs Variable Switch (fixed =0))	
	Q	New Issue Issue Cost Percent	Attribute(New Issue Cost (Percent))	
	R		Label Only	Label Only
	S	prior tick	Previous(T:[current tick])	
	T	current tick	S:[prior tick] + 1	
	U	Payment month switches:	Label Only	Label Only
	V	current YYYYMM	Current Date [YYYYMM]()	
	W	' in first month only, copy initial payment ...	Label Only	Label Only
	X	Payment month (1=YES)	Month Interval(Interest Payment Month (1-12),Number of Months B...	
	Y	' otherwise add increment	Label Only	Label Only
	Z	beginning payment tick	Previous(AB:[ending payment tick])	
	AA	increment	X:[Payment month (1=YES)] + N:[Months between payments] * AH...	
	AB	ending payment tick	Z:[beginning payment tick] + AA:[increment]	
	AC		Label Only	Label Only
	AD	if	L:[Sink Day (1-30)] = 0	
	AE	Sink Day Default = 1	1	
	AF	end if		
	AG	Sink Day Used	L:[Sink Day (1-30)] + AE:[Sink Day Default = 1]	
	AH	' set switch for retire tick	Label Only	Label Only
	AI	if	J:[Retire Date YYYYMM] = V:[current YYYYMM]	
	AJ	Is Retire Date	1	
	AK	end if		
	AL		Label Only	Label Only

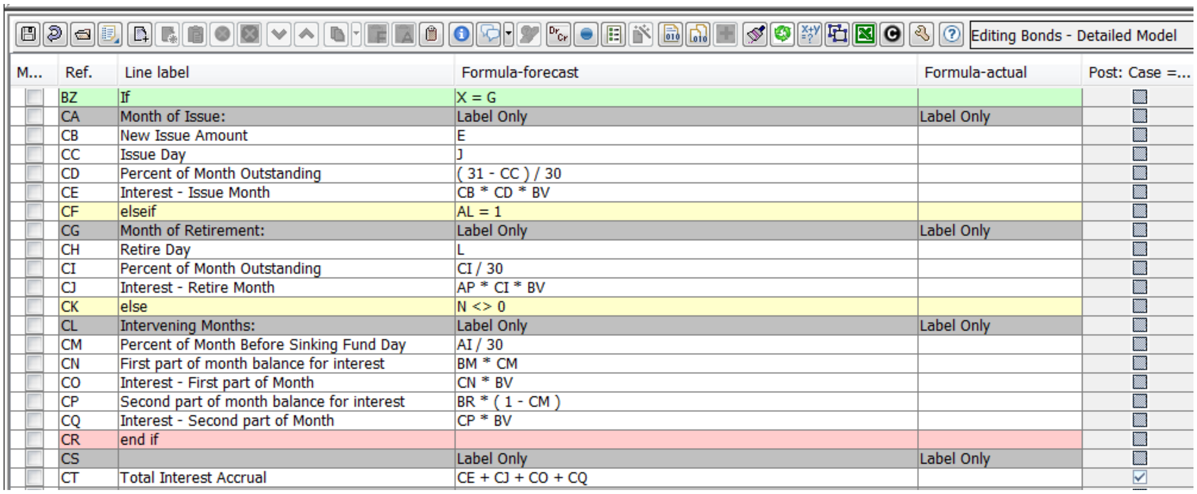
Mathematical Formulas

Mathematical formulas are easily created on report lines in the Edit Calculation screen. They are based on the line reference and the standard convention for the order of mathematical expressions. Formulas are entered by typing in the Formula-forecast and Formula-actual columns on a selected (highlighted) line. The user just types in the line reference and the desired mathematical operators as shown above. Note that unlike Excel, a formula is not prefixed with "=" - in the Calculation Editor, typing = and hitting enter opens the Function Editor. If the user does enter a formula beginning with "=", this will trigger a compile error.

Below are the allowable mathematical operators:

- **+** Addition
- **-** Subtraction
- ***** Multiplication
- **/** Division
- **(** Open Parentheses
- **)** Close Parentheses
- **^** Exponent
- **%** Modulus Operator

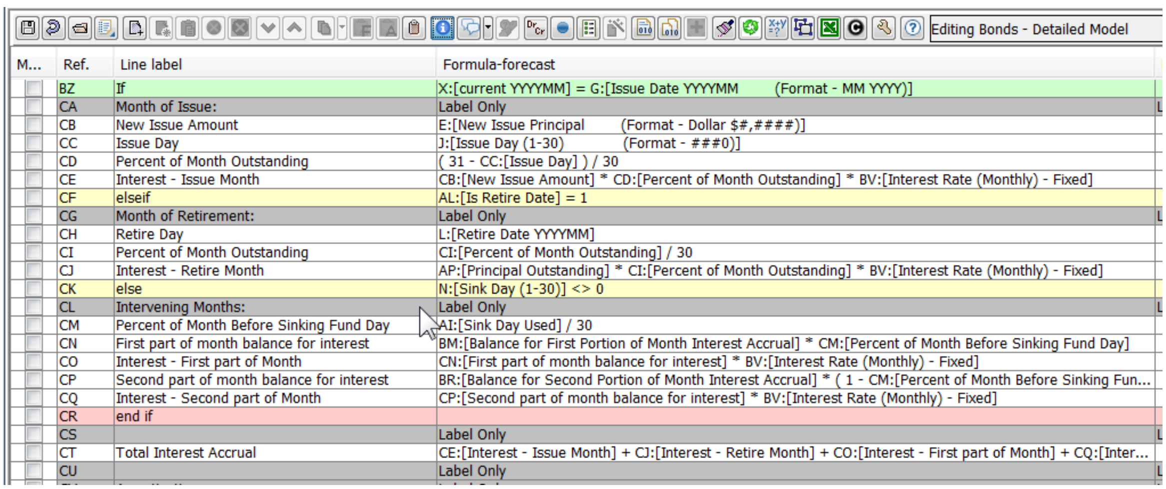
Below are some examples.



Editing Bonds - Detailed Model

M...	Ref.	Line label	Formula-forecast	Formula-actual	Post: Case =...
	BZ	If	X = G		
	CA	Month of Issue:	Label Only	Label Only	
	CB	New Issue Amount	E		
	CC	Issue Day	J		
	CD	Percent of Month Outstanding	(31 - CC) / 30		
	CE	Interest - Issue Month	CB * CD * BV		
	CF	elseif	AL = 1		
	CG	Month of Retirement:	Label Only	Label Only	
	CH	Retire Day	L		
	CI	Percent of Month Outstanding	CI / 30		
	CJ	Interest - Retire Month	AP * CI * BV		
	CK	else	N <> 0		
	CL	Intervening Months:	Label Only	Label Only	
	CM	Percent of Month Before Sinking Fund Day	AI / 30		
	CN	First part of month balance for interest	BM * CM		
	CO	Interest - First part of Month	CN * BV		
	CP	Second part of month balance for interest	BR * (1 - CM)		
	CQ	Interest - Second part of Month	CP * BV		
	CR	end if			
	CS		Label Only	Label Only	
	CT	Total Interest Accrual	CE + CJ + CO + CQ		

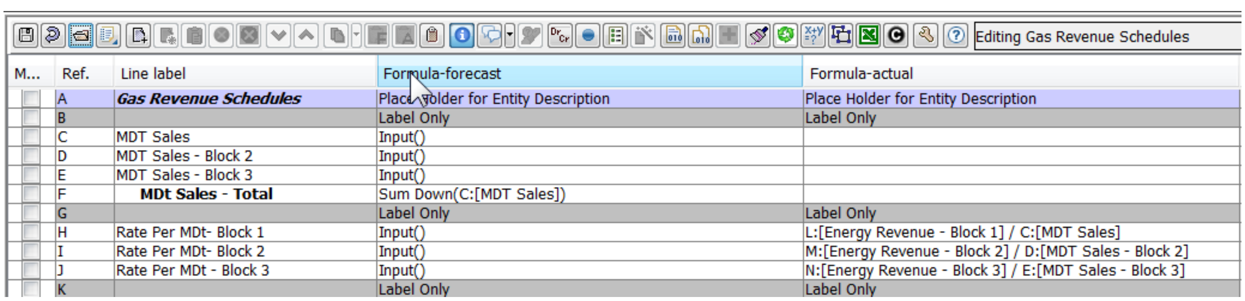
Note that the line names can be toggled on and off using the Show Full Line name button (or the ctrl-n hotkey). This can be helpful in reviewing formulas.



Editing Bonds - Detailed Model

M...	Ref.	Line label	Formula-forecast
	BZ	If	X:[current YYYYMM] = G:[Issue Date YYYYMM (Format - MM YYYY)]
	CA	Month of Issue:	Label Only
	CB	New Issue Amount	E:[New Issue Principal (Format - Dollar $#,####)]
	CC	Issue Day	J:[Issue Day (1-30) (Format - ###0)]
	CD	Percent of Month Outstanding	(31 - CC:[Issue Day]) / 30
	CE	Interest - Issue Month	CB:[New Issue Amount] * CD:[Percent of Month Outstanding] * BV:[Interest Rate (Monthly) - Fixed]
	CF	elseif	AL:[Is Retire Date] = 1
	CG	Month of Retirement:	Label Only
	CH	Retire Day	L:[Retire Date YYYYMM]
	CI	Percent of Month Outstanding	CI:[Percent of Month Outstanding] / 30
	CJ	Interest - Retire Month	AP:[Principal Outstanding] * CI:[Percent of Month Outstanding] * BV:[Interest Rate (Monthly) - Fixed]
	CK	else	N:[Sink Day (1-30)] <> 0
	CL	Intervening Months:	Label Only
	CM	Percent of Month Before Sinking Fund Day	AI:[Sink Day Used] / 30
	CN	First part of month balance for interest	BM:[Balance for First Portion of Month Interest Accrual] * CM:[Percent of Month Before Sinking Fund Day]
	CO	Interest - First part of Month	CN:[First part of month balance for interest] * BV:[Interest Rate (Monthly) - Fixed]
	CP	Second part of month balance for interest	BR:[Balance for Second Portion of Month Interest Accrual] * (1 - CM:[Percent of Month Before Sinking Fun...
	CQ	Interest - Second part of Month	CP:[Second part of month balance for interest] * BV:[Interest Rate (Monthly) - Fixed]
	CR	end if	
	CS		Label Only
	CT	Total Interest Accrual	CE:[Interest - Issue Month] + CJ:[Interest - Retire Month] + CO:[Interest - First part of Month] + CQ:[Inter...
	CU		Label Only

Mathematical formulas can also be entered in the Formula – Actual column.



Editing Gas Revenue Schedules

M...	Ref.	Line label	Formula-forecast	Formula-actual
	A	***Gas Revenue Schedules***	Place Holder for Entity Description	Place Holder for Entity Description
	B		Label Only	Label Only
	C	MDT Sales	Input()	
	D	MDT Sales - Block 2	Input()	
	E	MDT Sales - Block 3	Input()	
	F	**MDt Sales - Total**	Sum Down(C:[MDT Sales])	
	G		Label Only	Label Only
	H	Rate Per MDt- Block 1	Input()	L:[Energy Revenue - Block 1] / C:[MDT Sales]
	I	Rate Per MDt- Block 2	Input()	M:[Energy Revenue - Block 2] / D:[MDT Sales - Block 2]
	J	Rate Per MDt - Block 3	Input()	N:[Energy Revenue - Block 3] / E:[MDT Sales - Block 3]
	K		Label Only	Label Only

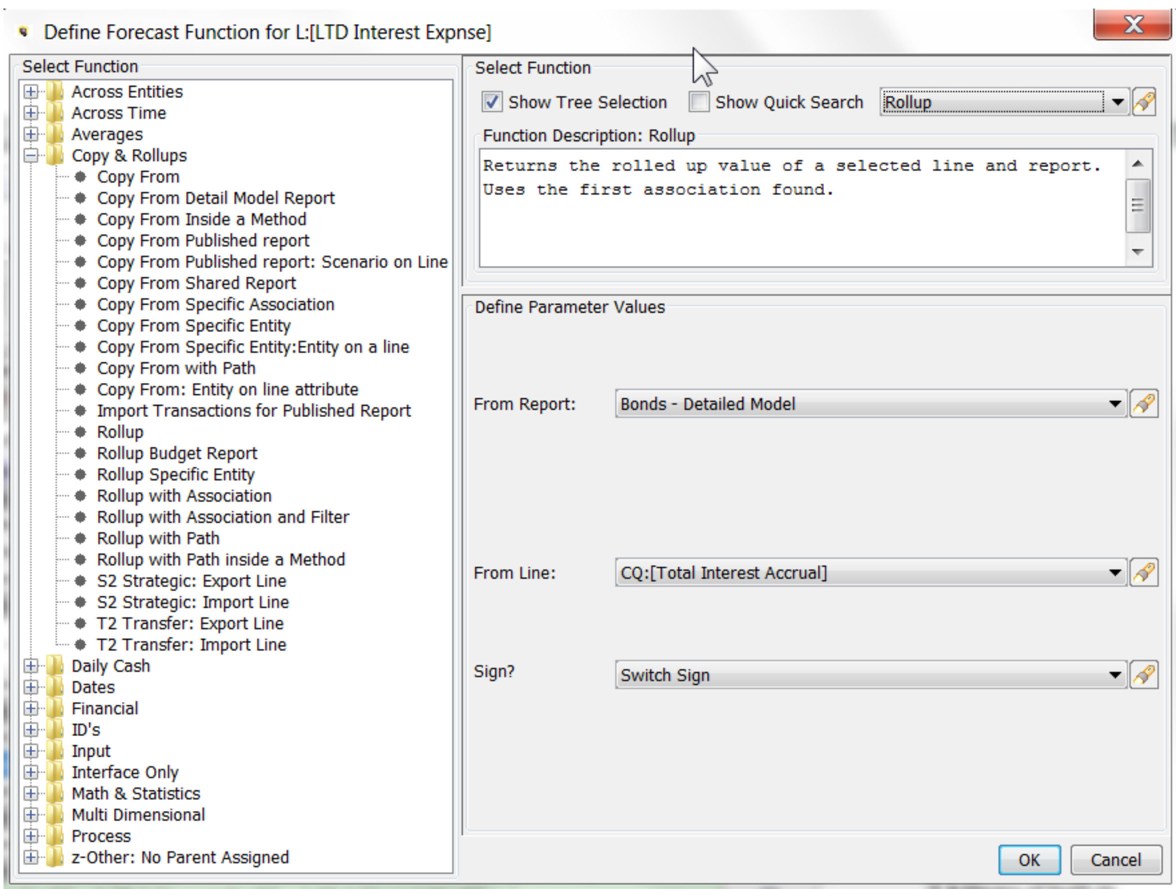
Functions

In building reports or instruction sets, the Calculation Editor makes available to the user over 175 built-in functions. Users will enter functions either by using the Function Editor dialog (see Function Editor) or by typing in function arguments directly from the keyboard without using the function editor dialog (see Typing Function Arguments).

The user selects the appropriate function for the given line, and sets any parameters needed. While most functions are available to calculations of all types (Financial Model, Multidimensional and CREV), note that certain functions are applicable only to one of two calculation types. Below are the current function trees for Model, Multidim and CREV calculations.

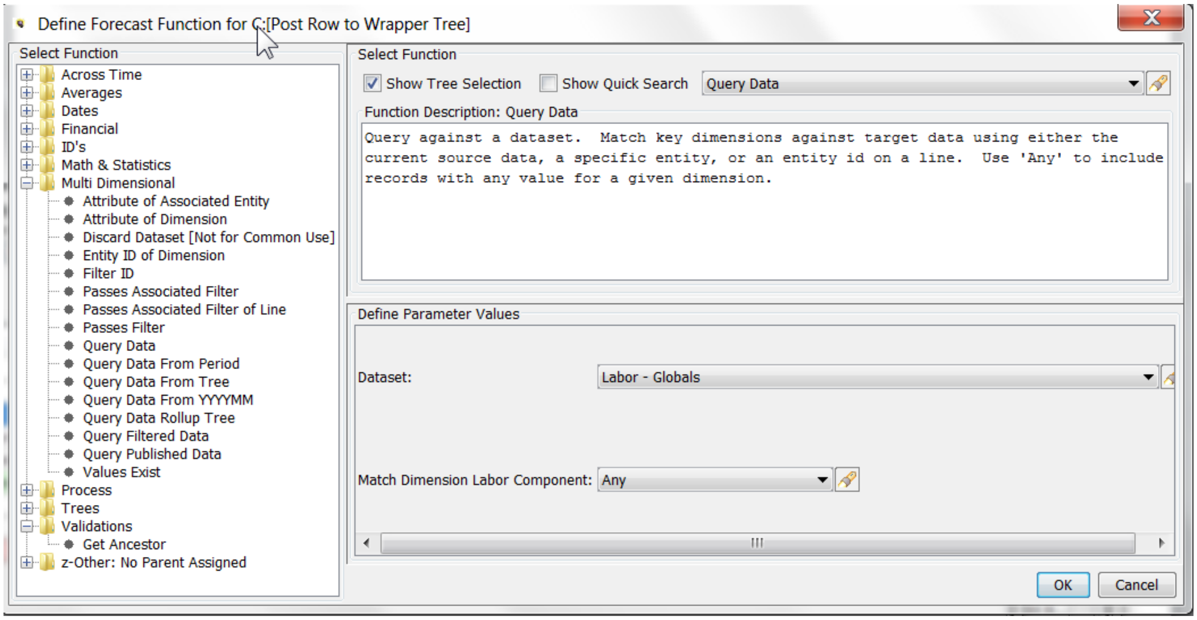
Financial Model

Below are the current Financial Model functions. One of the major differences between Financial Model functions and Multidim/CREV is that the model uses Copy & Rollups to reference data between reports, whereas the others use the QueryData functions. That said, the Financial Model does have some multidimensional functions available to it. The Model does not use Tree or Validations functions.



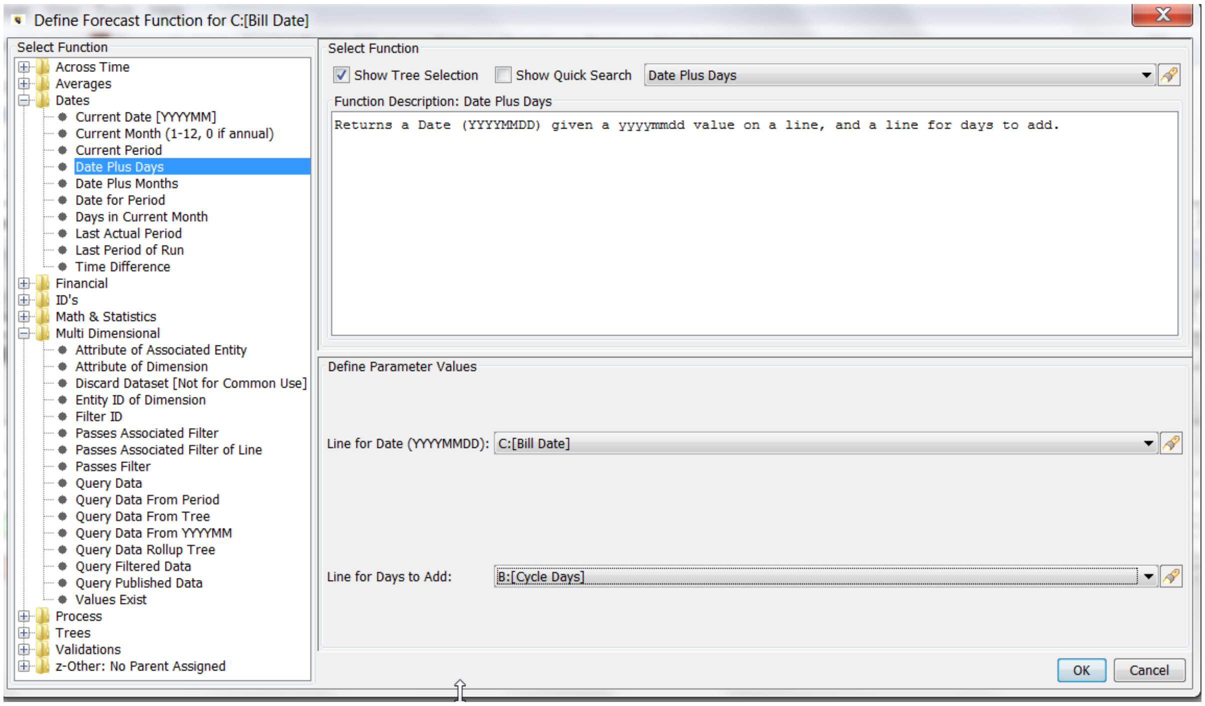
Multidimensional

Below are the current Multidimensional functions. Note that the Multidim does not use the Across Entities or Copy & Rollups functions at all, but it has Tree and Validation functions that are not used in the Financial Model. One note - if editing a dataset in a Multidimensional sequence, the only relevant function is Entity ID of dimension.



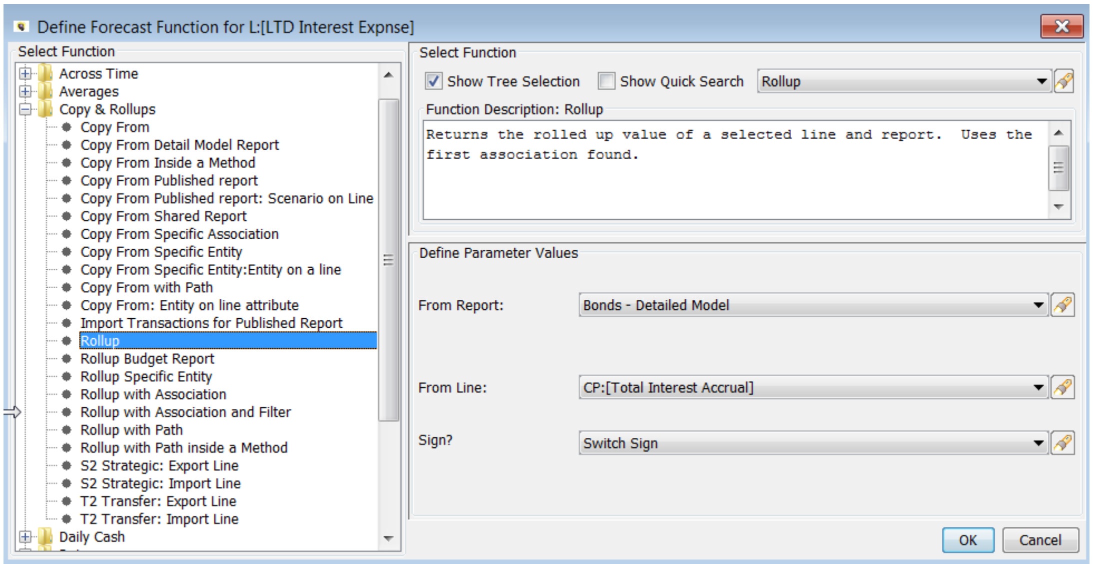
Customer Revenue

Below are the current Customer Revenue functions. CREV uses mostly the same functions as Multidim, but has a few functions only used by CREV calculations. Also, if editing a dataset in a CREV sequence, the only relevant function is Entity ID of dimension



Function Editor

The Function Editor allows the user to insert a function onto a given line by selecting from a library of built-in functions. The top of the dialog indicates the line selected, and whether it is a Forecast formula or an Actuals formula. The middle section contains a short description of the selected function. Below the description, there is a section listing the parameters associated with that function. See Function Parameters for more information.

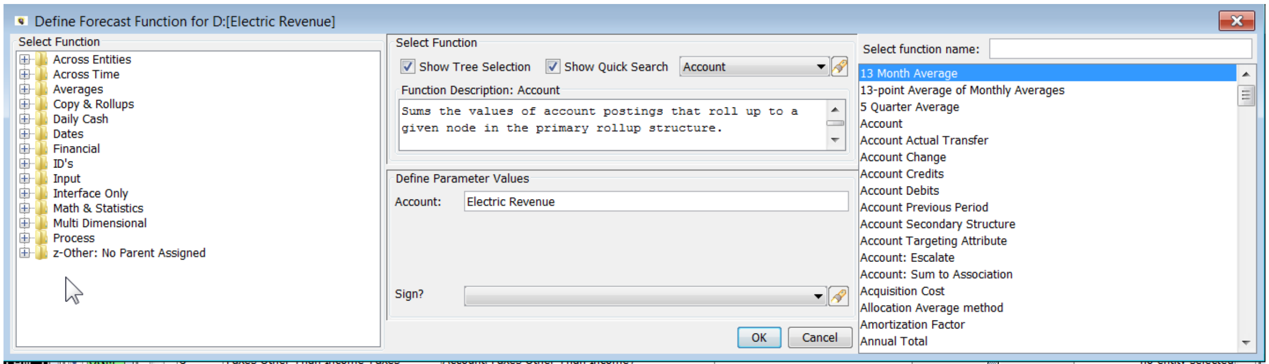


The Function Editor dialog box (shown below) is accessed in a number of ways. Select a line and highlight either the Forecast formula or Actuals formula). Be sure to just select the cell, not double-click (as in editing. Below are the options for opening the Function Editor:

- Click the Function Editor command button
- Use the <ctrl-F> hotkey
- select "=" and hit Enter
- Use the right click option and select Function Editor

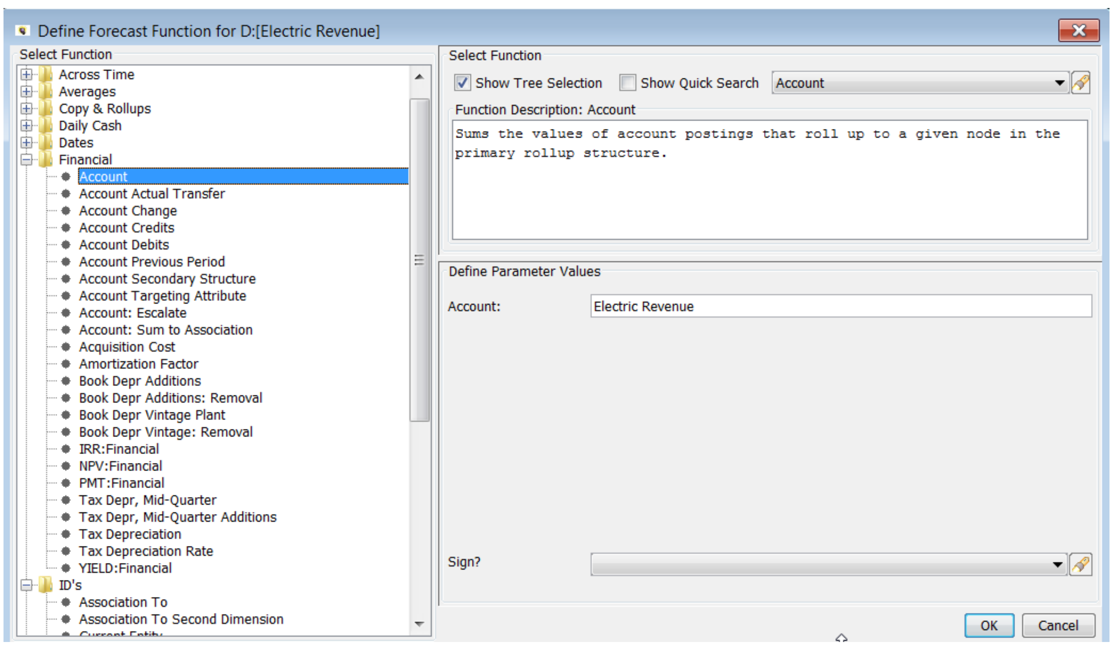
When the Function Editor dialog opens, select the Function to use and fill in the parameters to use (if applicable). Then hit Ok, and the function will be placed in the selected line.

Note - the Function Editor remembers the last function used and presents it at as a suggestion. Select the function from the drop-down list in the center panel. Alternatively, the Function Editor has two view options to facilitate selecting the appropriate function to use. In the center of the dialog are two checkboxes – Show Tree Selection and Show Quick Search. These two options give users two different ways to find the function to use.



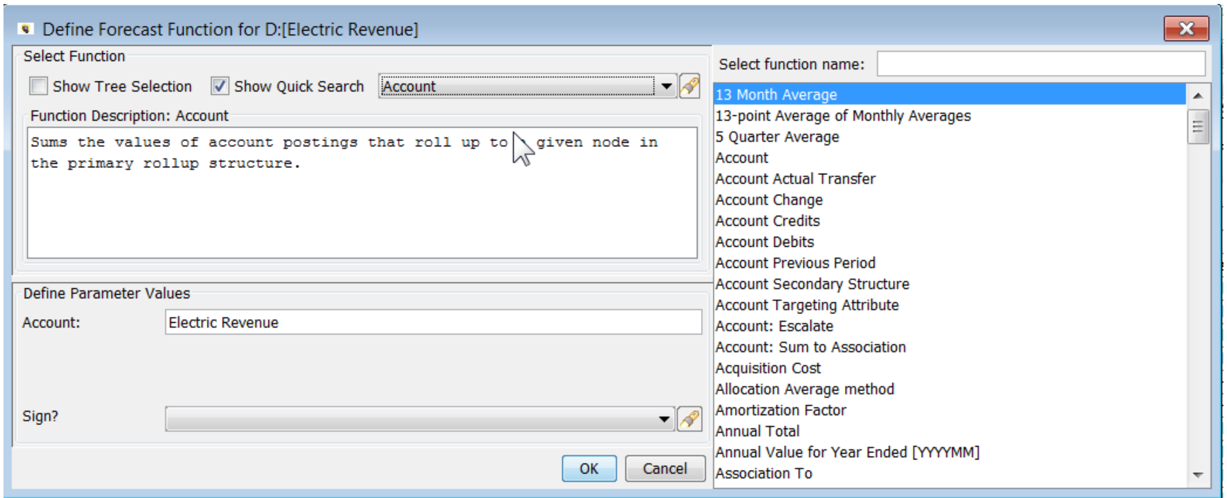
Show Tree Selection

The Show Tree Selection displays a tree view of the available functions, grouped by type.

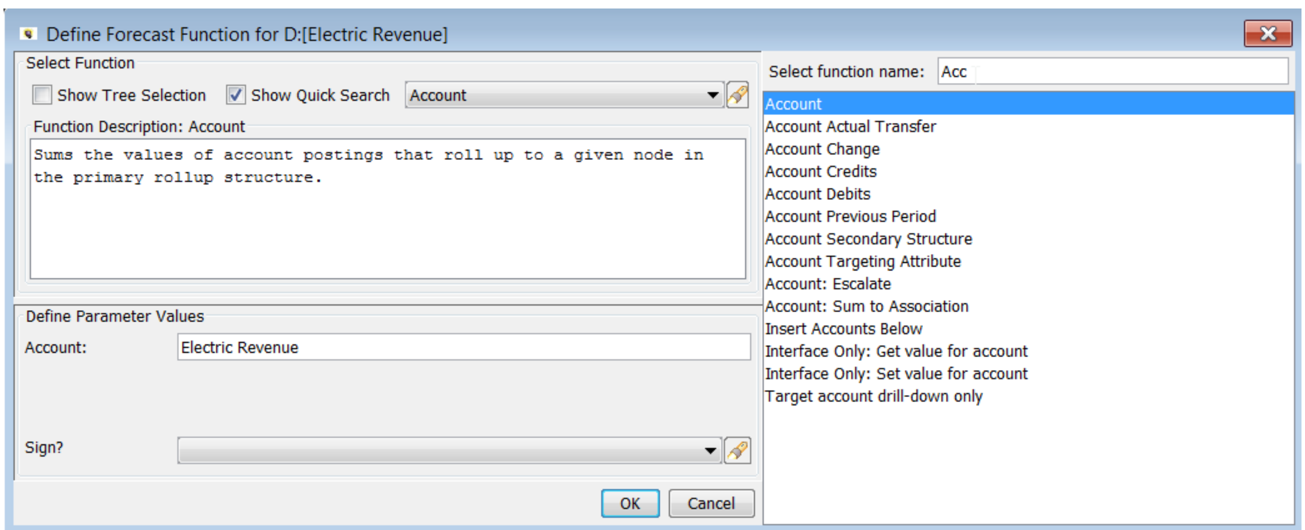


Show Quick Search

The Show Quick Search checkbox displays an alphabetical list of all available functions. Select the one to use.



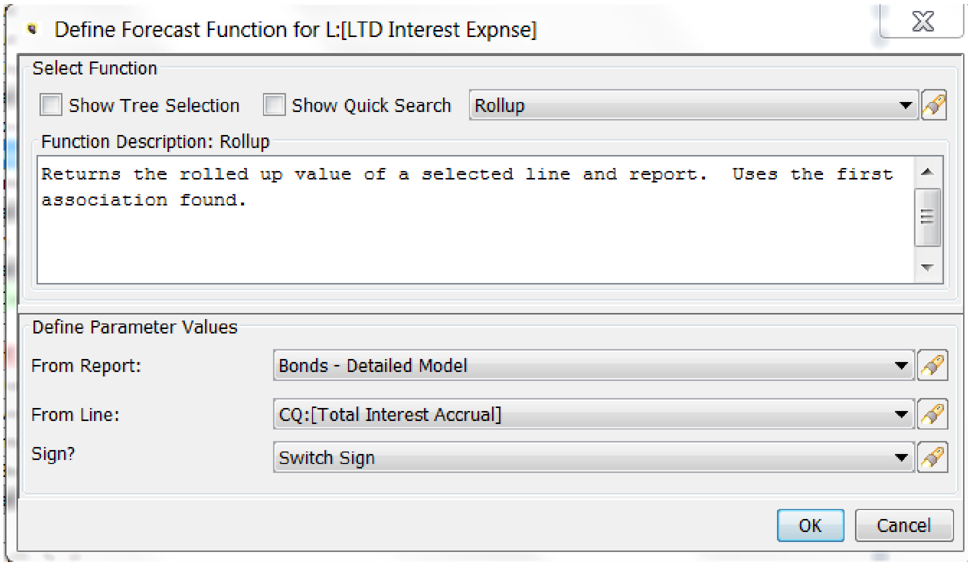
The Quick Search option allows the user to type in part of a function name, and it will do a text search and display all functions with that in the name. This can make it easy to find a function.

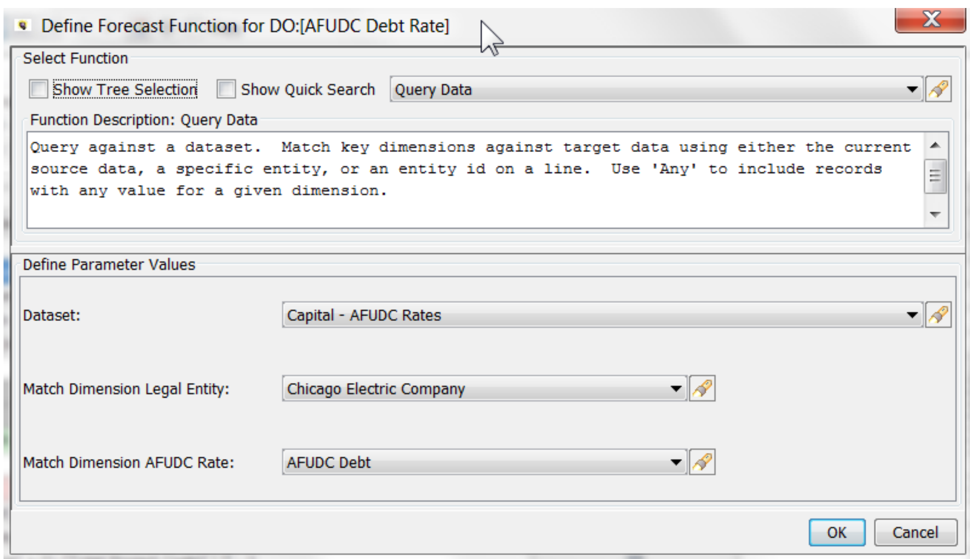


Function Parameters

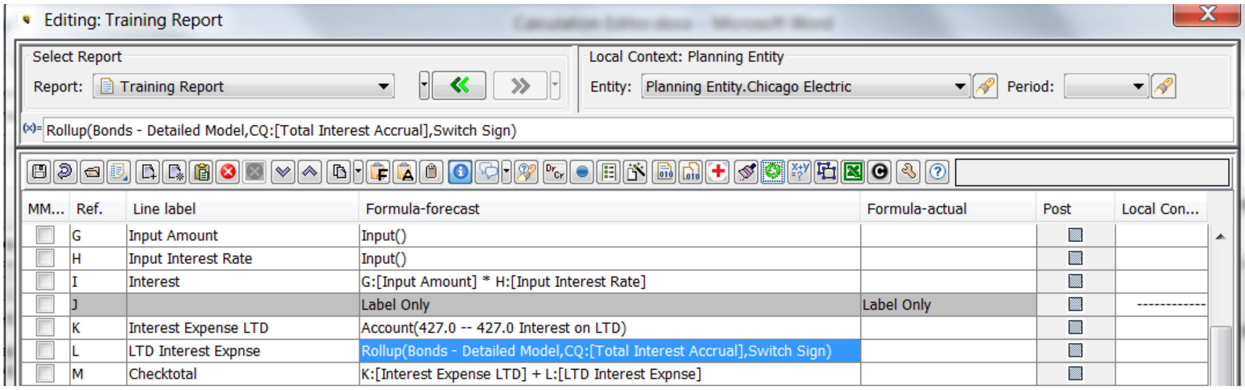
While some functions just return a value, most functions have one or more required parameters or settings. They may also have optional parameters. Populate the desired parameters by selecting from the drop-down boxes or the checkboxes, as appropriate. Note: Almost all functions support the optional argument Switch sign? The default is no. If Switch Sign is selected, the return value is multiplied by -1.

Below are two examples.



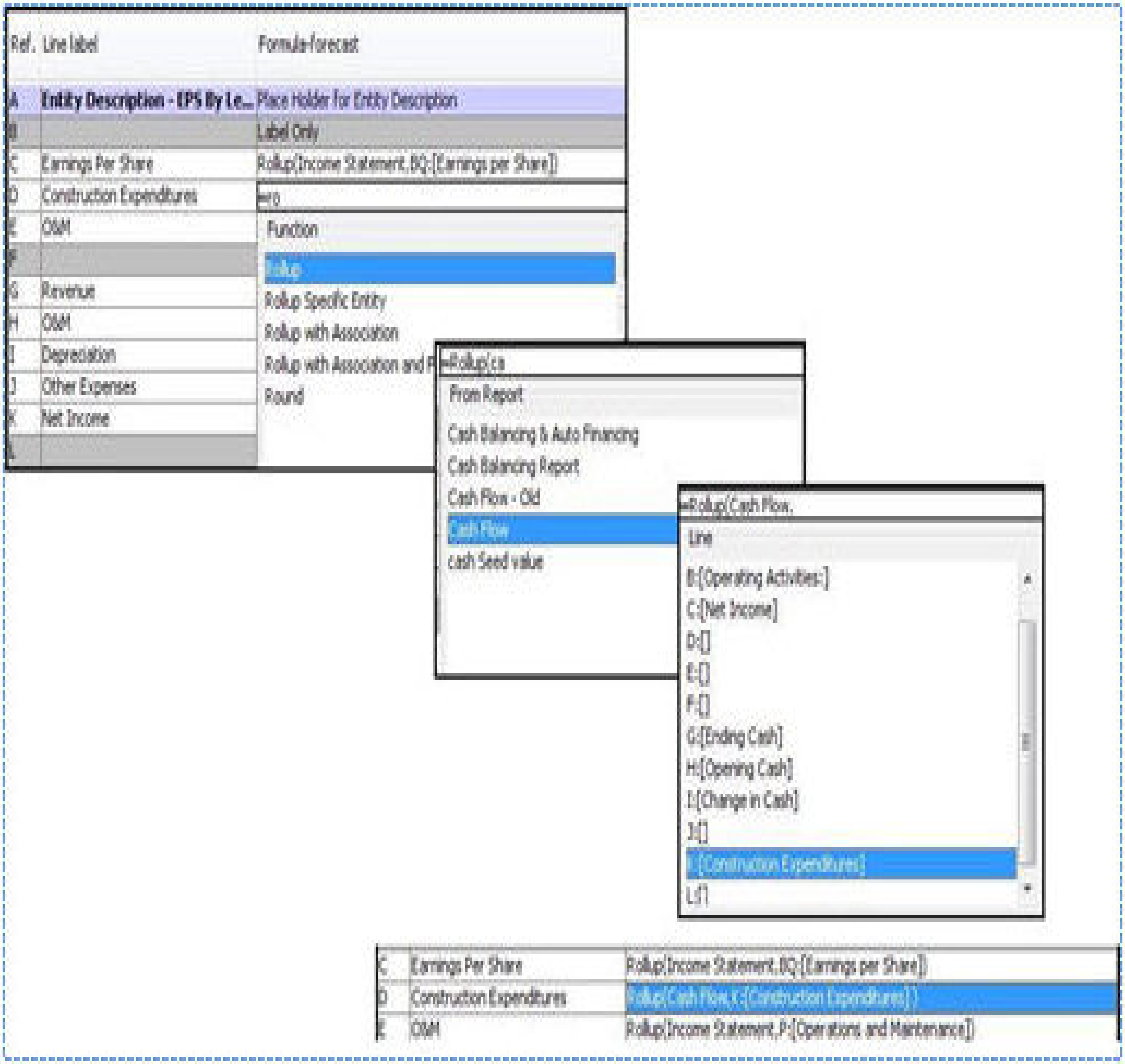


Note – while the Calculation Editor shows the function parameters in the grid and in the text box at the top of the screen, they cannot be modified there. To modify a function it is necessary to select the line and do it in the Function Editor.



Typing Function Arguments

The Calculation Editor also allows the user to select functions and enter arguments directly from the keyboard. Select a formula cell and type “=” and type in the desired function. As the name is entered, a list of functions will be shown. Use the up/-down arrows and the enter button to make the selection. Any function arguments will be presented sequentially. Select as desired and continue the process. This process is shown below.



Conditional Logic

The conditional logic functionality in the calculation editor provides users with significant additional flexibility in building out the business logic. Users put in IF, IF/ELSE, or IF ELSEIF/ELSEIF logic, and UIPlanner evaluates the conditional logic, and only processes logic within if tests that evaluate to True. There is also a function If Else, that allows a one-line condensed version of If Logic. Below are two examples of conditional logic in UIPlanner calculations.

Financial Model

This calculation has embedded If-Tests to post the initial issuance (when the current date equals the issue date attribute) and to determine the interest rate to use (an If-Else based on the Variable Rate switch).

Editing Bonds - Detailed Model

MM...	Ref.	Line label	Formula-forecast	Formula-actual
	AS	Current Period Activity:	Label Only	Label Only
	AT	If	D:[Issue Date - YYYYMM] = S:[current YYYYMM]	
	AU	New Issue - Principal	M:[New Issue Principal]	
	AV	New Issue - Issue Cost	AU:[New Issue - Principal] * N:[New Issue Issue Cost Percent] / 100	
	AW	New Issue - Discount (Premium)	Label Only	Label Only
	AX	end if		
	AY	If	AG:[Is Retire Date] = 1	
	AZ	Retirement	AK:[Principal Outstanding] * AG:[Is Retire Date]	
	BA	else		
	BB	Sinking Fund	Input()	
	BC	End if		
	BD	Reacquisition of Principal	Input()	
	BE	Sinking Funds + Retirements + Reacq...	AZ:[Retirement] + BB:[Sinking Fund] + BD:[Reacquisition of Principal]	
	BF		Label Only	Label Only
	BG	Transfer to Current Liability	Value from Period(BE:[Sinking Funds + Retirements + Reacquisitions], 12)	
	BH		Label Only	Label Only
	BI	Balance for First Portion of Month Inte...	AK:[Principal Outstanding]	
	BJ	(+) New Issue Principal	AU:[New Issue - Principal]	
	BK	(-) Retirement	AZ:[Retirement]	
	BL	(-) Sinking Fund Payment	BB:[Sinking Fund]	
	BM	(-) Reacquisition of Principal	BD:[Reacquisition of Principal]	
	BN	Balance for Second Portion of Month I...	BI:[Balance for First Portion of Month Interest Accrual] + BJ:[(+) New Issue Principa...	
	BO		Label Only	Label Only
	BP	Interest Accrual:	Label Only	Label Only
	BQ	if	L:[Variable Rate Switch] = 0	
	BR	Interest Rate (Monthly) - Fixed	K:[Fixed Interest Rate] / 12 / 100	
	BS	else		
	BT	Interest Rate (Monthly) - Variable	Input()	
	BU	end if		
	BV	Interest Rate	BR:[Interest Rate (Monthly) - Fixed] + BT:[Interest Rate (Monthly) - Variable]	

The example above (lines BQ-BV) illustrates how the conditional logic is decoded. With the IF/ELSE function, one result will be True and one will be False. UIPlanner will only process the lines within the True branch. The calculation is built to take advantage of this. On Line BV, the Interest Rate to Use is the sum of BR (Fixed)and BT (Variable). Since only one branch will be true, the Interest Rate to Use will be either one or the other.

Multidimensional

This calculation has embedded IF tests to only process in the forecast months, and to post dollars and hours/units differently.

Viewing: O&M - Post Budget Data [O&M - Budget Data]

Ref.	Line label	Formula	Post: Case = Formula C...
A	Last actuals period	Last Actual Period(-- For Scenario --)	☐
B	Current period	Current Period()	☐
C	if	B:[Current period] > A:[Last actuals period]	☐
D	Unit Type	Entity ID of Dimension(Unit Type)	☐
E	Dollars	Entity ID(Unit Type,Dollars)	☐
F	if	D:[Unit Type] = E:[Dollars]	☐
G	Post direct row value for dollars	Row Value()	☐
H	else		☐
I	Hours	Row Value()	☐
J	Rate	Query Data(Labor - Summary Results,Supplying Center,Resource Category,Budgetable Rate)	☐
K	Post hours converted to dollars	I:[Hours] * J:[Rate]	☐
L	end if	F:[if]	☐
M	Post O&M Budget to Index	G:[Post direct row value for dollars] + K:[Post hours converted to dollars]	☑
N	Post O&M Budget to Results	Row Value()	☑
O	end if	C:[if]	☐

Conditional Operators

The conditional logic in the calculation editor is constructed using IF and END-IF to denote the conditional group. Within that, the use can optionally use ELSE or any number of ELSE-IF statements. The IF and ELSEIF statements need to have condition tests in the formula (Formula-forecast or Formula-actual columns) that will evaluate to True or False. In Boolean logic, these are 1 and 0. The conditional logic can use the standard comparison operators:

< Less than

> Greater than

<= Less than or Equal

>= Greater than or Equal

<> Not Equal

= Equal

These can be combined into compound expressions using AND or OR, as well as parentheses. Below is an example of compound conditional logic

W	if	(H:[New Employee?] = 1 AND V:[Initial ST Rate to Use] <> 0) OR (H:[New Employee?] = 0)
X	Union Step Increase %	Query Data(Labor - Union Step Increase %,SubResource)
Y	Non-Union Step Increase %	Query Data(Labor - Global Labor Assumptions,Step Increase %)
Z	Step Increase to use	If Else(D:[Resource Type],=,E:[Union],X:[Union Step Increase %],Y:[Non-Union Step Increase %])
AA	Step Increase %	If Else(V:[Initial ST Rate to Use],<>,A:[Zero],Z:[Step Increase to use],A:[Zero])

Constructing Conditional Logic

To build conditional logic

1) Insert several blank lines into the calculation where the conditional logic will go.

2) Type the word IF into the line label cell for the first line. This will change the line color, and an END-IF will be inserted below it.

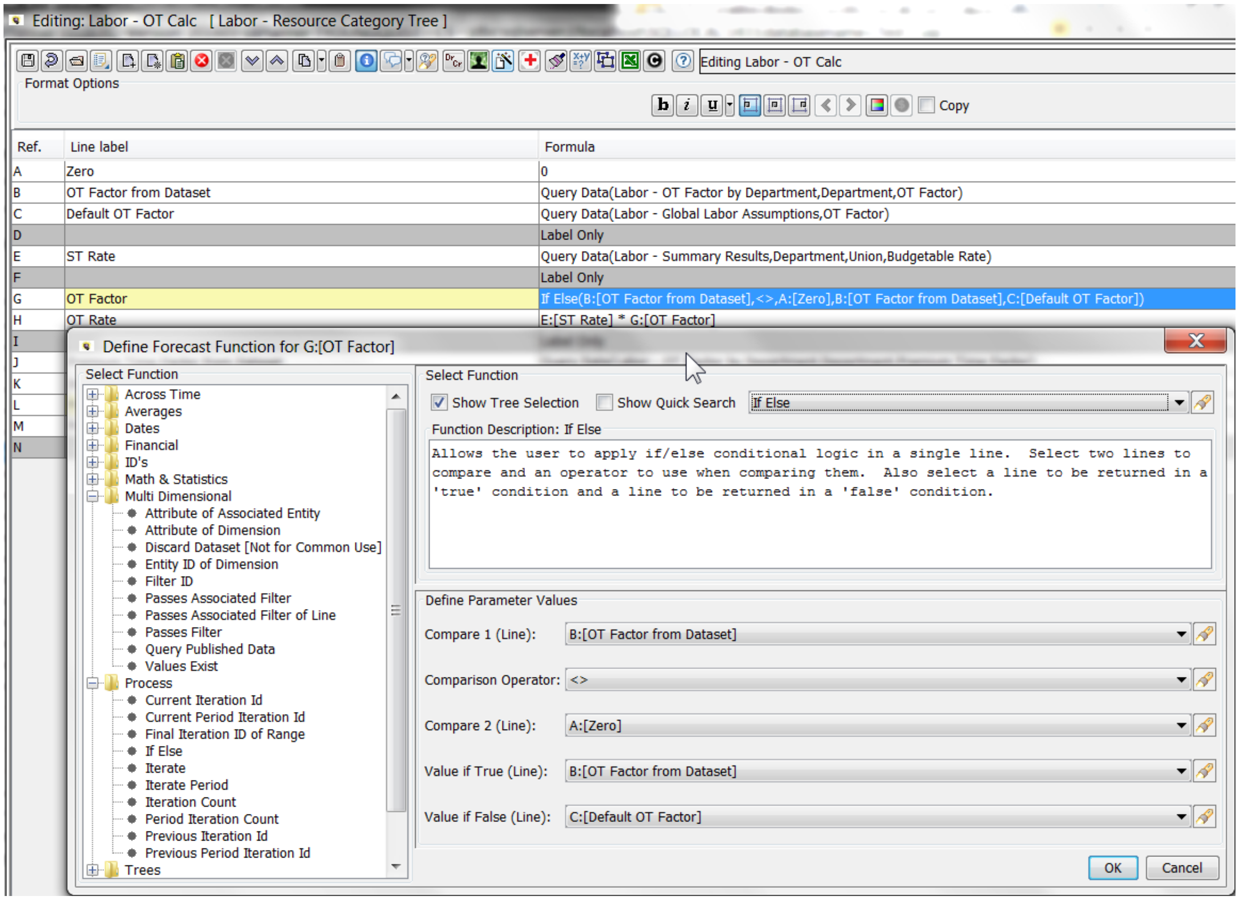
3) Type the conditional logic test into formula cell for the IF line

4) Insert lines as needed in between the IF and END IF. These are what the engine will process if the IF test is met (evaluates to True).

5) As needed, insert an ELSE line or ELSEIF lines (with logic tests). Type these words into the label lines and the lines will change color and be tagged appropriately.

If-Else Function

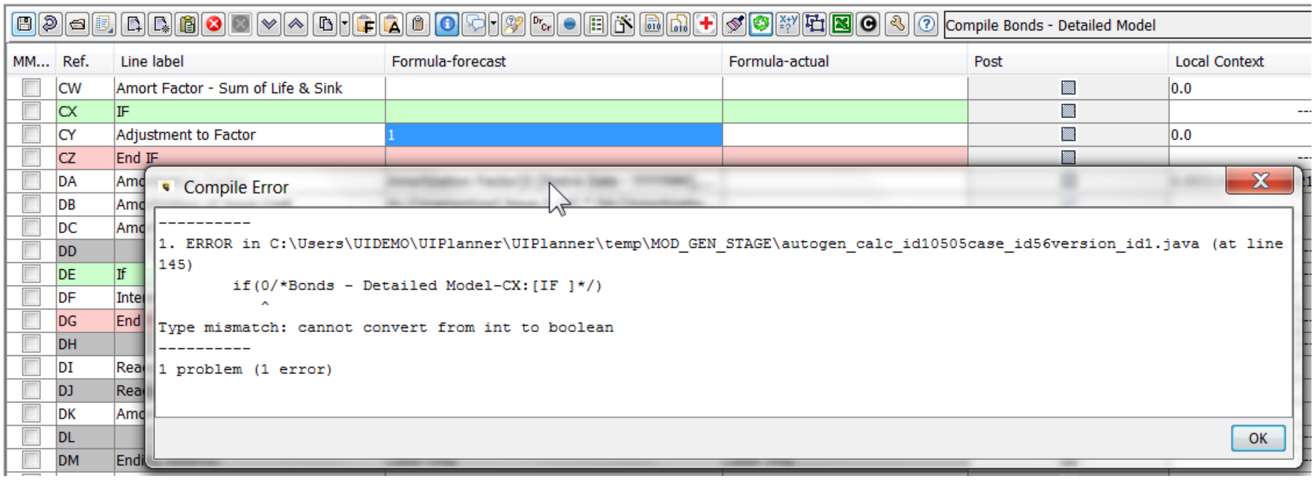
As indicated in the description, the If-Else function allows the user to apply if/else conditional logic in a single line. The user select two lines to compare and an operator to use when comparing them, and selects a line to be returned in a 'true' condition and a line to be returned in a 'false' condition. See below.



Conditional Logic Compile Error

If the user has set up an IF test but not populated the conditional logic, the calculation engine will give the following compile error. In the Financial Model, this will appear when the user hits Save; in multidimensional calculations, this will be displayed when the rule set is compiled and run. The error message is the same.

Note that this dialog indicates the line with the error, and identifies that it is a conditional logic error (see the text - cannot convert from int to Boolean).



Tip – if a calculation is still in process and the logic for the IF test is not finalized, the calculation will not compile and cannot be saved. In order to be able to save it, just enter 1=1 in the If line. This will evaluate to True, and will compile and allow a save.

Postings - Financial Model

Postings in the Financial Model are what generate the Income Statement and Balance Sheets. The Financial Model has its own built-in Planning Ledger, with Revenue, Expense, Asset and Liability accounts, as well as Direct and Indirect cash flow accounts. Uses build the business logic and determine the calculation lines that they want to post to the ledger. The financial statements are then built from accounts in the Planning Ledger.

Below is a screen shot of the Planning Ledger and below it, a sample drilldown from Browse Reports showing Income Statement amounts that were posted from a calculation.

- Revenue
  - Utility Revenue
    - Electric Revenue
      - Electric Rate Revenue
        - 440.0 Residential sales.
        - 442.0 Commercial and industrial sales.
        - 444.0 Public street and highway lighting.
        - 445.0 Other sales to public authorities (Major only).
        - 446.0 Sales to railroads and railways (Major only).
        - 447.0 Sales for resale.
        - 448.0 Interdepartmental sales.
        - 449.0 Other sales (Nonmajor only).
        - 449.1 Provision for rate refunds.
      - Electric Misc Revenues
    - Gas Revenue
    - Steam Revenue
    - Affiliate Revenue
    - Goal Seek Revenue
  - Utility Operating Income
  - Income Accounts
  - Other Income And Deductions
  - Extraordinary Income Items
  - Discontinued Operations (Income)
  - Cumulative Effect of Change in Acctg (Income)
- Expense
- Net Income
- Asset
- Liability
- Direct Cash
- Indirect Cash

Select Entities | Browse Report | Graph Data | Excel Options

UIDEMO-Financial Statements-Income Statement

Format Report | Search Table | Drilldown on Data | Action Panel

Drilldown D:[Electric Revenue] - Chicago Electric (Mar/2015)

Account(Electric Revenue)

Transaction	From report	From line	From Entity	Amount
Credit/Orig	Electric Revenue Schedules	AD:[Total Revenue]	Chicago Electric - Commercial MI	47,548
Credit/Orig	Electric Revenue Schedules	AD:[Total Revenue]	Chicago Electric - Industrial MI	16,647
Credit/Orig	Electric Revenue Schedules	AD:[Total Revenue]	Chicago Electric - Street Lighting MI	643
Credit/Orig	Electric Revenue Schedules	AD:[Total Revenue]	Chicago Electric - Wholesale	819
Credit/Orig	Other Operating Revenue	E:[Total 450 Account]	Chicago Electric	39
Credit/Orig	Other Operating Revenue	I:[Total 451 Account]	Chicago Electric	97
Credit/Orig	Other Operating Revenue	N:[Total 454 Account]	Chicago Electric	120
Credit/Orig	Other Operating Revenue	Y:[Total 456 Account]	Chicago Electric	383
	Total			410,117

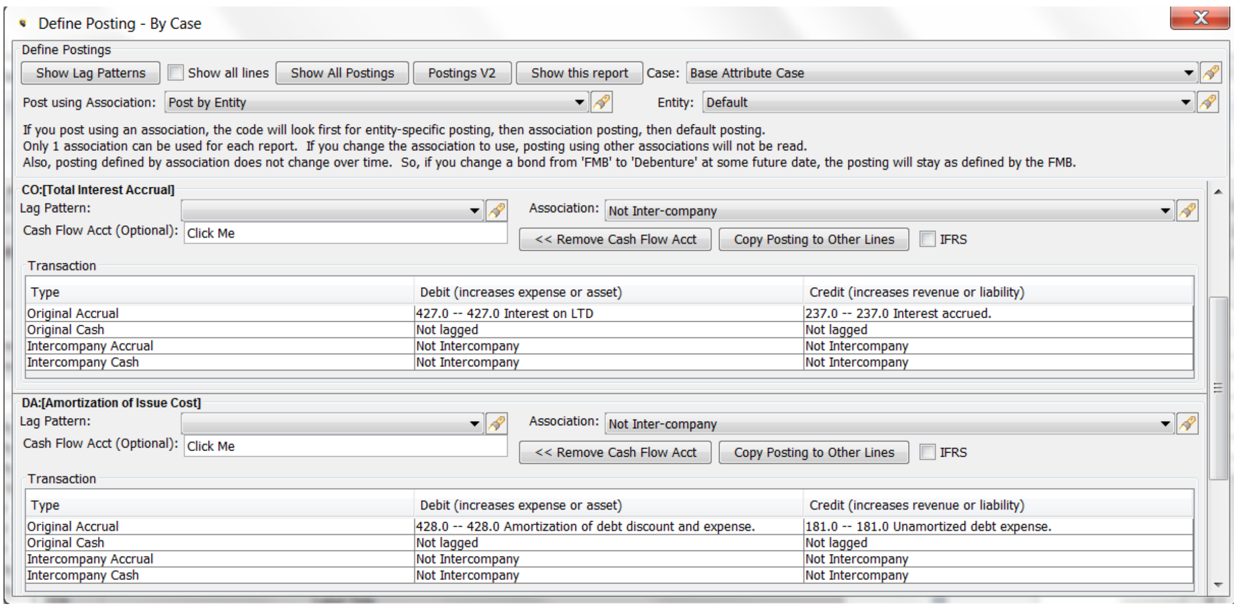
Report: Income Statement

Detail Model 2015-2019 Defer CapEx	Jan 2015	Feb 2015	Mar 2015	Apr 2015	May 2015	Jun 2015	Jul 2015	Aug 2015	Sep 2
Chicago Electric									
Operating Revenue:									
Electric Revenue	476,223	418,986	410,117	357,704	384,883	462,812	541,778	535,815	41
Gas Revenue	0	0	0	0	0	0	0	0	
Affiliate Revenue	0	0	0	0	0	0	0	0	
Total Operating Revenue	476,223	418,986	410,117	357,704	384,883	462,812	541,778	535,815	41
Operating Expenses:									

To assign postings to a calculation, select the posting column to be shown in the Calculation Grid. The Posting column has a checkbox for each line in the grid. Select the checkbox on a line to Post it. Then select the Posting control button (or <ctrl> p) to bring up the Posting dialog.

Posting Dialog

Below is the Financial Model Postings dialog. Note that the dialog shows all lines tagged to post in the currently active report. The Postings Dialog opens up to the selected line. Scroll to view/post other lines.



The Postings dialog is divided into two regions.

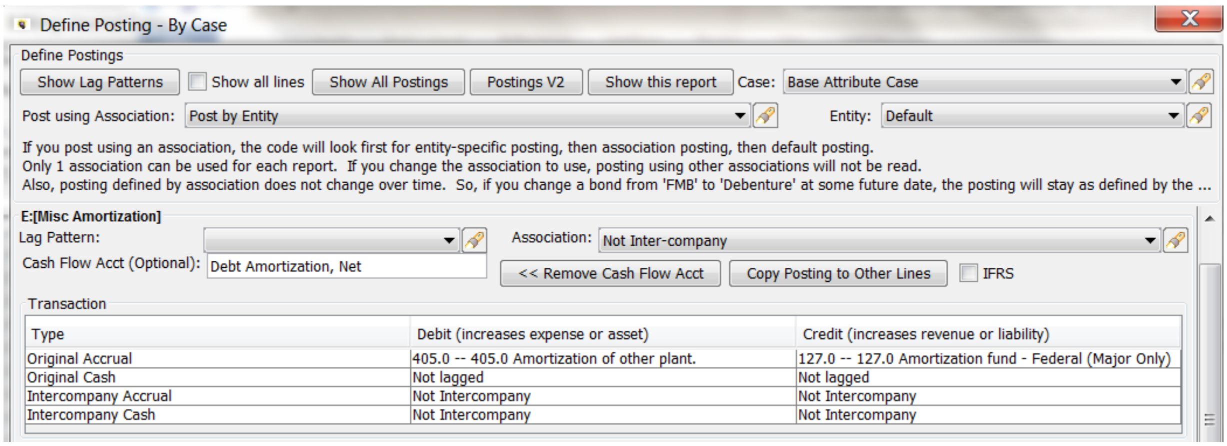
Posting Settings and Reports – the top region has dropdowns that allow the user to set some overall settings for the overall report, as well as several action buttons for reports, etc.

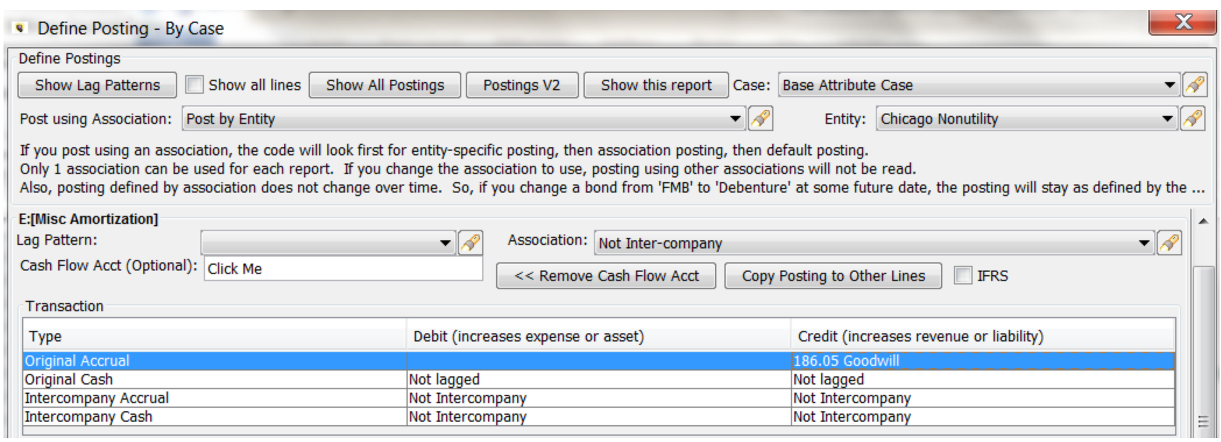
Postings by Line – the bottom of the dialog is a scrollable region that lists the posting settings for each posted line.

Below are the controls in the top region of the dialog.

Entity

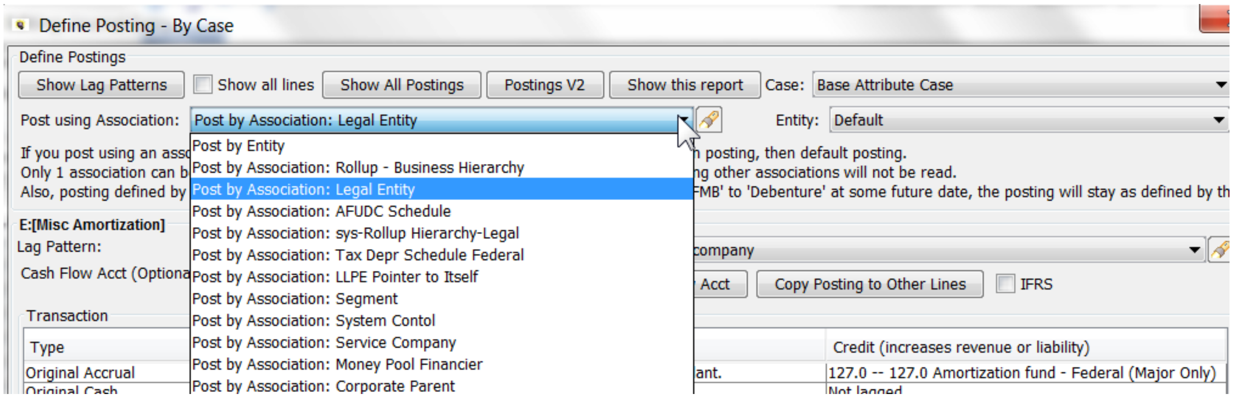
When the posting dialog opens, it is set to the Default, which means that the postings are applied to all entities identically. This drop-down allows the user to specify that postings for a specific entity differ from the other postings that have been configured. The user can specify all elements of a posting or just one side – the engine will accept the default for entries not populated. See below.





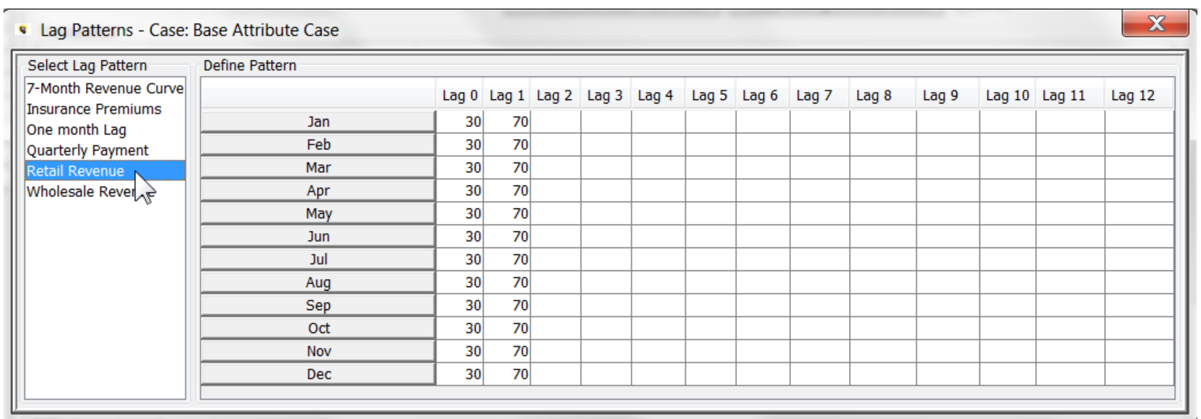
Post using Association

The default for the Postings dialog is to post by Entity. This dropdown allows the user to specify that the postings are instead determined by an association of the entity to another entity. The drop down lists all associations for the current entity group. Note the rules by which the posting will be decoded.



Show Lag Patterns

The Show Lag Patterns button opens up the Edit Lag Patterns dialog. This allows the user to view lag patterns or to edit the factors.

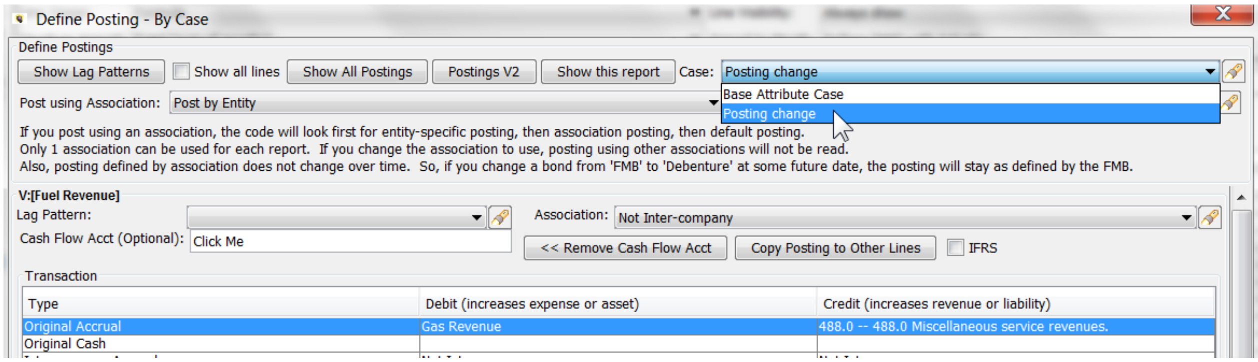


Show all lines

The default for the Postings dialog is to display only the lines tagged to post. This checkbox will show all lines in the current report, whether tagged to post or not.

Case

Financial Model postings are by default stored in the Base Attribute case – this is indicated in the column header. However, model postings can be stored in an overlay attribute case, allowing users to do what-ifs on different posting options. Use the Case dropdown to select a different case. Postings follow winner logic, so postings assigned in an overlay attribute case will “win” over the Base Attribute case.

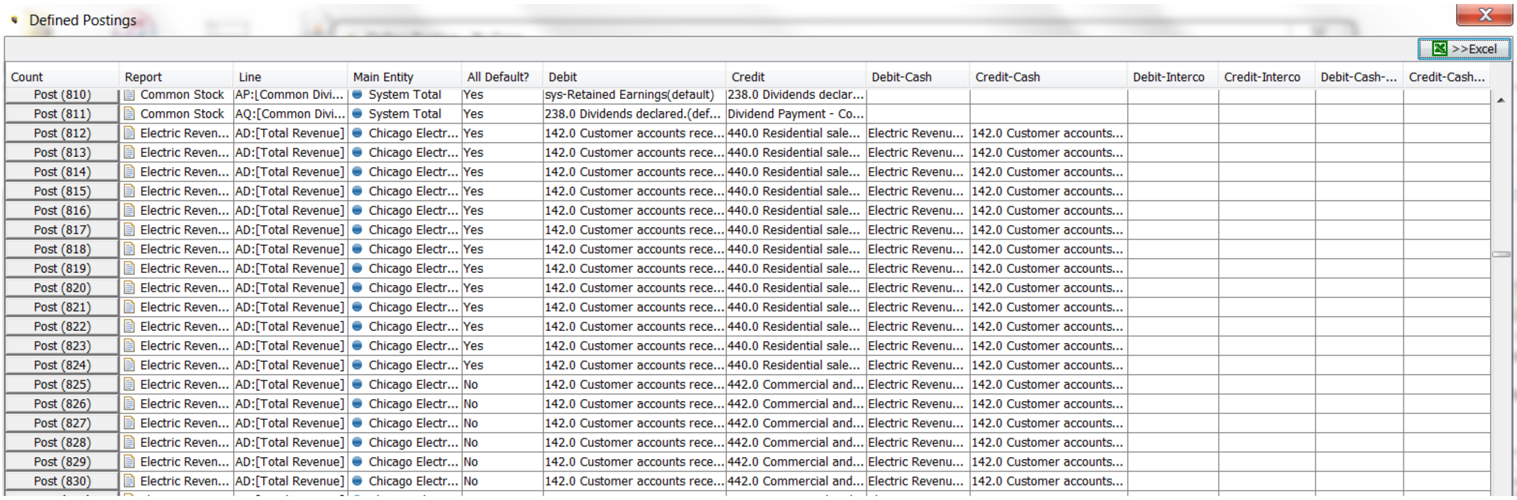


Posting Reports

The top of the Postings dialog also has three buttons that allow the user to produce reports showing posting summaries. Note that the reports show the default postings for each entity.

Show all Postings

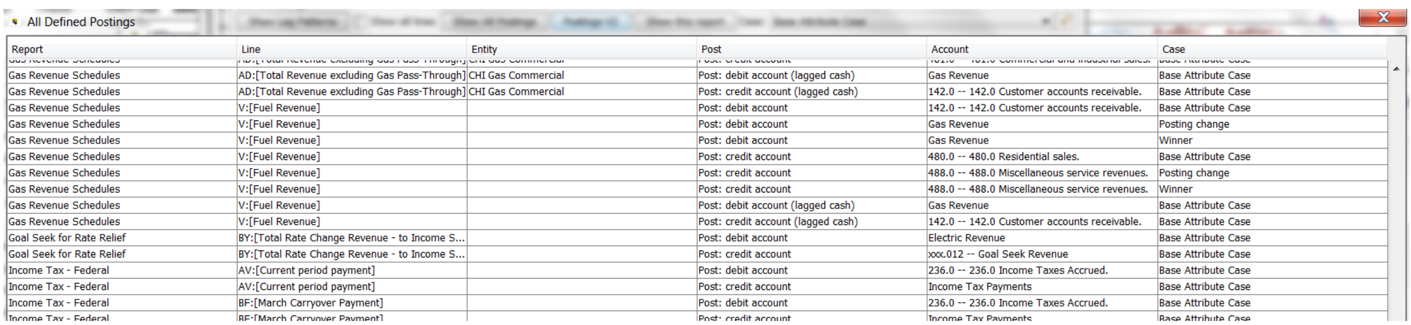
This button shows all postings for all reports in a grid, with separate columns for each component of the posting entry. The dialog has a button to send the report to Excel.



Count	Report	Line	Main Entity	All Default?	Debit	Credit	Debit-Cash	Credit-Cash	Debit-Interco	Credit-Interco	Debit-Cash-...	Credit-Cash...
Post (810)	Common Stock	AP:[Common Divi...	System Total	Yes	sys-Retained Earnings(default)	238.0 Dividends declar...						
Post (811)	Common Stock	AQ:[Common Divi...	System Total	Yes	238.0 Dividends declared.(def...	Dividend Payment - Co...						
Post (812)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (813)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (814)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (815)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (816)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (817)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (818)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (819)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (820)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (821)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (822)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (823)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (824)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	Yes	142.0 Customer accounts rece...	440.0 Residential sale...	Electric Revenu...	142.0 Customer accounts...				
Post (825)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	No	142.0 Customer accounts rece...	442.0 Commercial and...	Electric Revenu...	142.0 Customer accounts...				
Post (826)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	No	142.0 Customer accounts rece...	442.0 Commercial and...	Electric Revenu...	142.0 Customer accounts...				
Post (827)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	No	142.0 Customer accounts rece...	442.0 Commercial and...	Electric Revenu...	142.0 Customer accounts...				
Post (828)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	No	142.0 Customer accounts rece...	442.0 Commercial and...	Electric Revenu...	142.0 Customer accounts...				
Post (829)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	No	142.0 Customer accounts rece...	442.0 Commercial and...	Electric Revenu...	142.0 Customer accounts...				
Post (830)	Electric Reven...	AD:[Total Revenue]	Chicago Electr...	No	142.0 Customer accounts rece...	442.0 Commercial and...	Electric Revenu...	142.0 Customer accounts...				

Postings V2

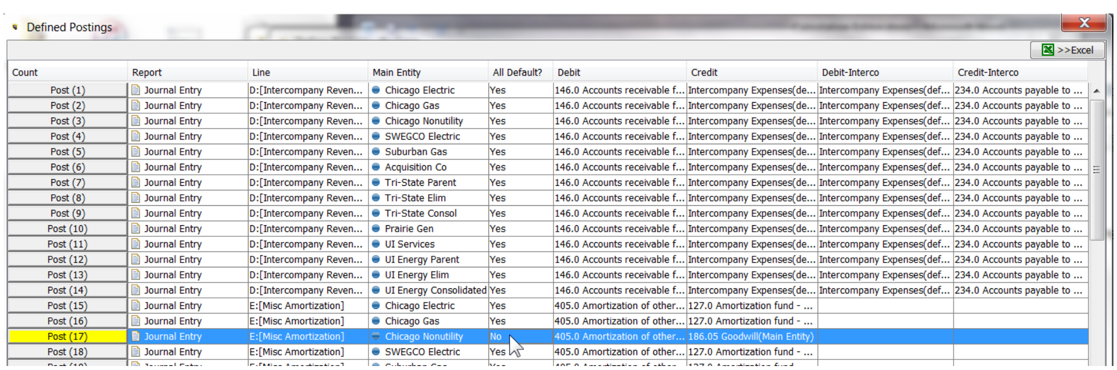
This button shows an alternate view of the postings, with the accounts by line.



Report	Line	Entity	Post	Account	Case
Gas Revenue Schedules	AD:[Total Revenue excluding Gas Pass-Through]	CHI Gas Commercial	Post: debit account (lagged cash)	Gas Revenue	Base Attribute Case
Gas Revenue Schedules	AD:[Total Revenue excluding Gas Pass-Through]	CHI Gas Commercial	Post: credit account (lagged cash)	142.0 -- 142.0 Customer accounts receivable.	Base Attribute Case
Gas Revenue Schedules	V:[Fuel Revenue]		Post: debit account	142.0 -- 142.0 Customer accounts receivable.	Base Attribute Case
Gas Revenue Schedules	V:[Fuel Revenue]		Post: debit account	Gas Revenue	Posting change
Gas Revenue Schedules	V:[Fuel Revenue]		Post: debit account	Gas Revenue	Winner
Gas Revenue Schedules	V:[Fuel Revenue]		Post: credit account	480.0 -- 480.0 Residential sales.	Base Attribute Case
Gas Revenue Schedules	V:[Fuel Revenue]		Post: credit account	488.0 -- 488.0 Miscellaneous service revenues.	Posting change
Gas Revenue Schedules	V:[Fuel Revenue]		Post: credit account	488.0 -- 488.0 Miscellaneous service revenues.	Winner
Gas Revenue Schedules	V:[Fuel Revenue]		Post: debit account (lagged cash)	Gas Revenue	Base Attribute Case
Gas Revenue Schedules	V:[Fuel Revenue]		Post: credit account (lagged cash)	142.0 -- 142.0 Customer accounts receivable.	Base Attribute Case
Goal Seek for Rate Relief	BY:[Total Rate Change Revenue - to Income S...		Post: debit account	Electric Revenue	Base Attribute Case
Goal Seek for Rate Relief	BY:[Total Rate Change Revenue - to Income S...		Post: credit account	xxx.012 -- Goal Seek Revenue	Base Attribute Case
Income Tax - Federal	AV:[Current period payment]		Post: debit account	236.0 -- 236.0 Income Taxes Accrued.	Base Attribute Case
Income Tax - Federal	AV:[Current period payment]		Post: credit account	Income Tax Payments	Base Attribute Case
Income Tax - Federal	BF:[March Carryover Payment]		Post: debit account	236.0 -- 236.0 Income Taxes Accrued.	Base Attribute Case

Show This Report

This button shows posting only for the current report. The dialog has a button to send the report to Excel.

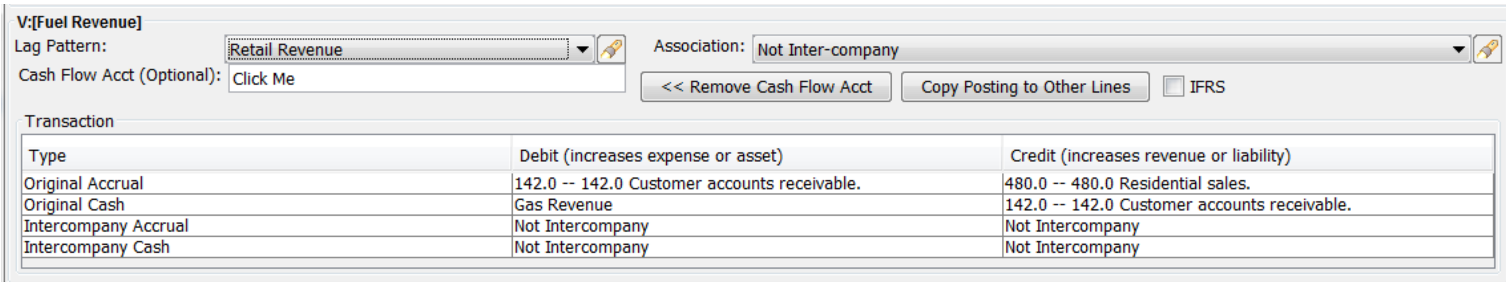


Count	Report	Line	Main Entity	All Default?	Debit	Credit	Debit-Interco	Credit-Interco
Post (1)	Journal Entry	D:[Intercompany Reven...	Chicago Electric	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (2)	Journal Entry	D:[Intercompany Reven...	Chicago Gas	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (3)	Journal Entry	D:[Intercompany Reven...	Chicago Nonutility	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (4)	Journal Entry	D:[Intercompany Reven...	SWEGCO Electric	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (5)	Journal Entry	D:[Intercompany Reven...	Suburban Gas	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (6)	Journal Entry	D:[Intercompany Reven...	Acquisition Co	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (7)	Journal Entry	D:[Intercompany Reven...	Tri-State Parent	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (8)	Journal Entry	D:[Intercompany Reven...	Tri-State Elim	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (9)	Journal Entry	D:[Intercompany Reven...	Tri-State Consol	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (10)	Journal Entry	D:[Intercompany Reven...	Prairie Gen	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (11)	Journal Entry	D:[Intercompany Reven...	UI Services	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (12)	Journal Entry	D:[Intercompany Reven...	UI Energy Parent	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (13)	Journal Entry	D:[Intercompany Reven...	UI Energy Elim	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (14)	Journal Entry	D:[Intercompany Reven...	UI Energy Consolidated	Yes	146.0 Accounts receivable f...	Intercompany Expenses(de...	Intercompany Expenses(def...	234.0 Accounts payable to ...
Post (15)	Journal Entry	E:[Misc Amortization]	Chicago Electric	Yes	405.0 Amortization of other...	127.0 Amortization fund - ...		
Post (16)	Journal Entry	E:[Misc Amortization]	Chicago Gas	Yes	405.0 Amortization of other...	127.0 Amortization fund - ...		
Post (17)	Journal Entry	E:[Misc Amortization]	Chicago Nonutility	No	405.0 Amortization of other...	186.05 Goodwill(Main Entity)		
Post (18)	Journal Entry	E:[Misc Amortization]	SWEGCO Electric	Yes	405.0 Amortization of other...	127.0 Amortization fund - ...		

Below are the controls in the Postings by line region.

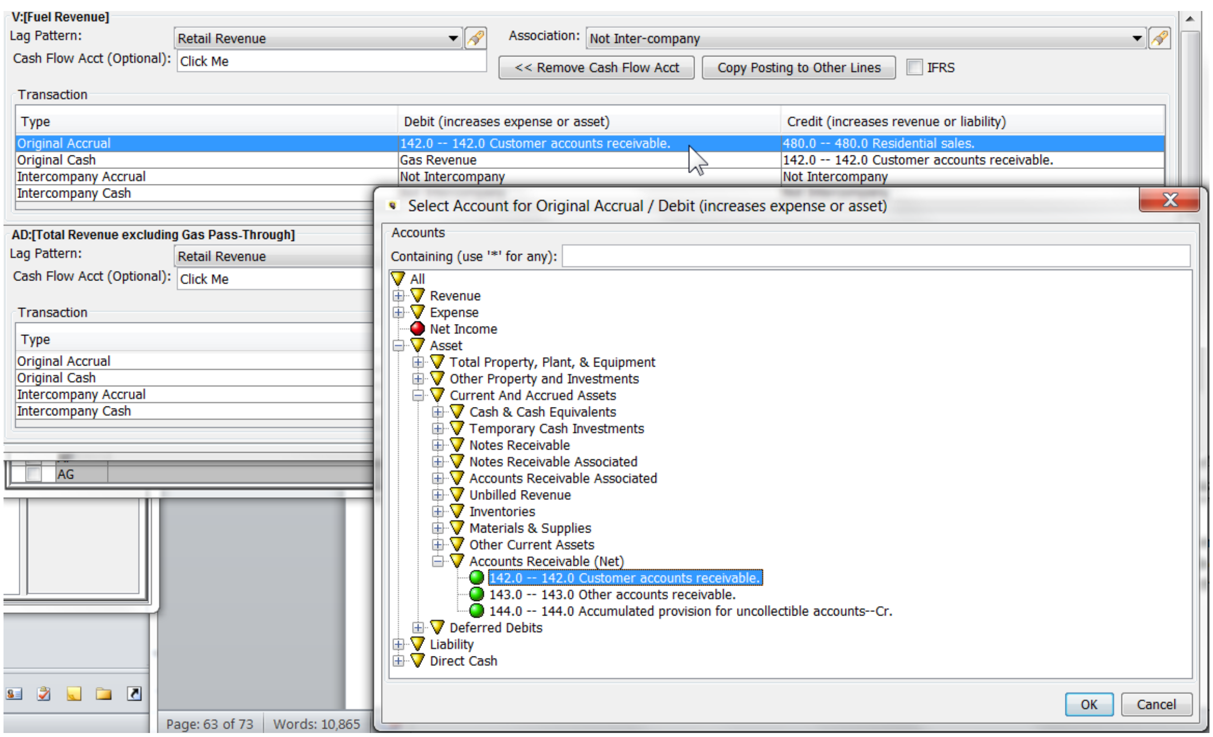
Postings Grid

The postings grid is where the user configures the postings for the selected line.

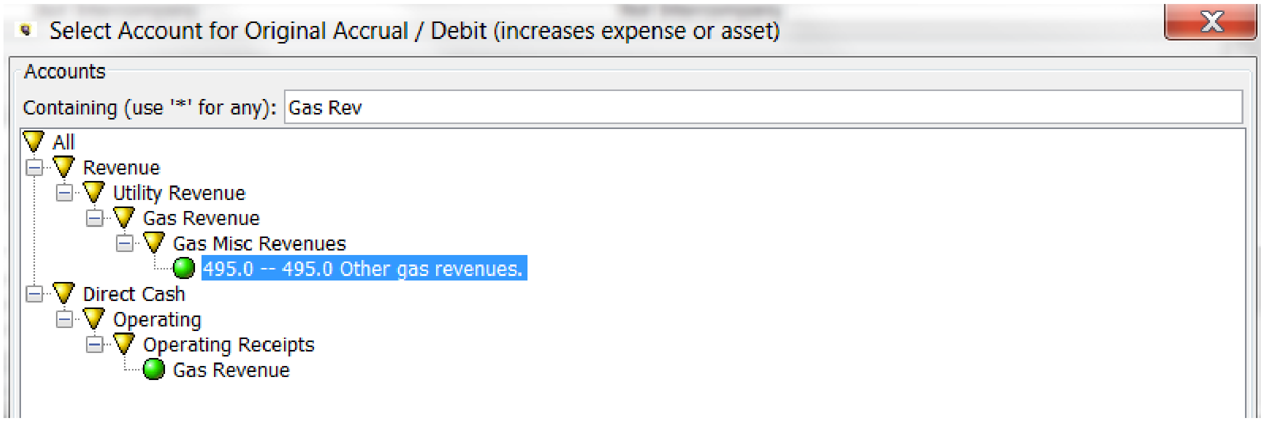


The selected line is indicated above and to the left of the postings grid.

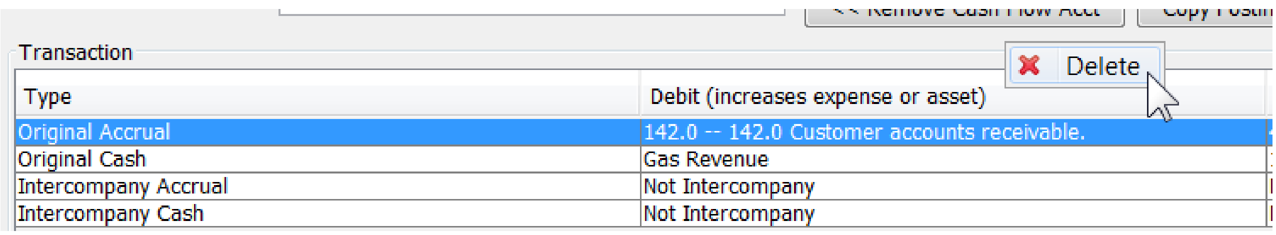
Based on the selections in the various droplists (Lag Pattern, Intercompany), the lines in the grid will be enabled or not. Clicking in the white Debit or Credit cell will bring up a dialog showing the Planning Ledger (the Indirect Cash Flow accounts are now shown, as they cannot be directly posted to). Select the desired account – note that postings are only valid to leaf nodes



Use the text search text box to find an account in the Planning Ledger to bring up The Postings Select accounts to post to.



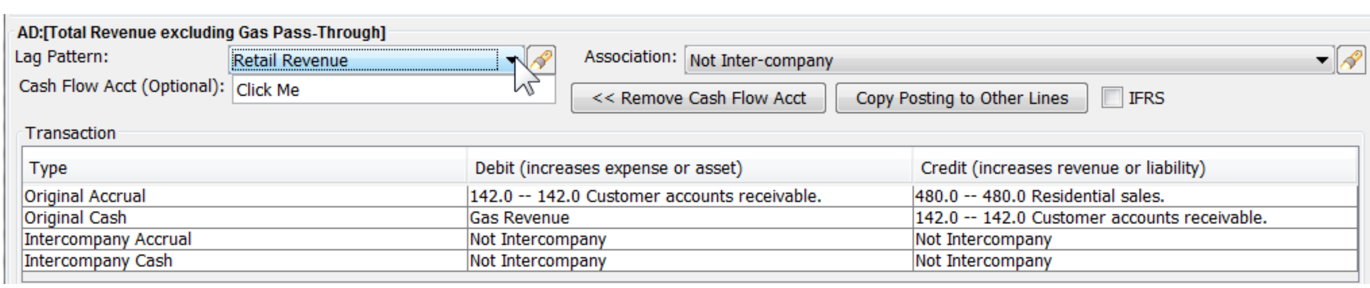
To delete a posting, select it and right-click. Then hit the x – Delete button.



The minimum for all postings is the Original Accrual. The Debit and Credit for these must be populated. The other lines will be enabled for posting depending upon the selections in the Lagged and Intercompany drop-down boxes.

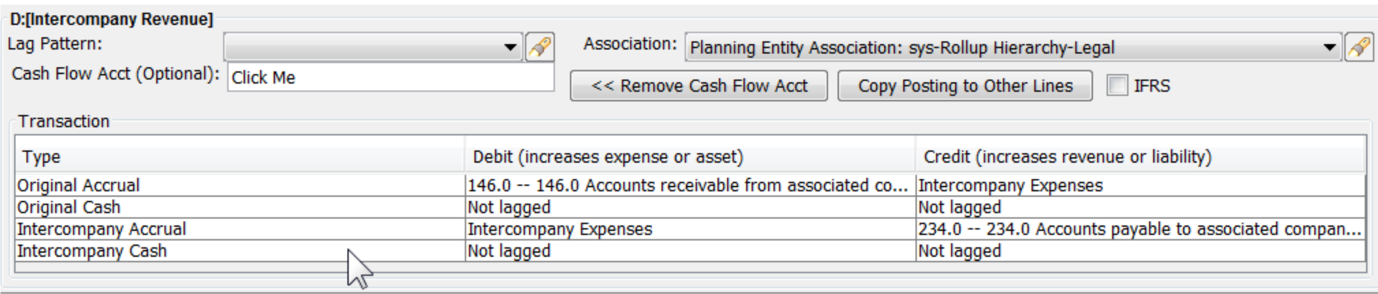
Lagging

To tag a posting to be lagged, select a Lag Pattern from the drop-down. This will enable the Cash lines for accounts to be selected. Note that when the user selects a balance sheet account on the Original Accrual line, that same account will be automatically selected in the other side of the transaction on the Cash side. This ensures that when the cash side posts, it clears the original account.



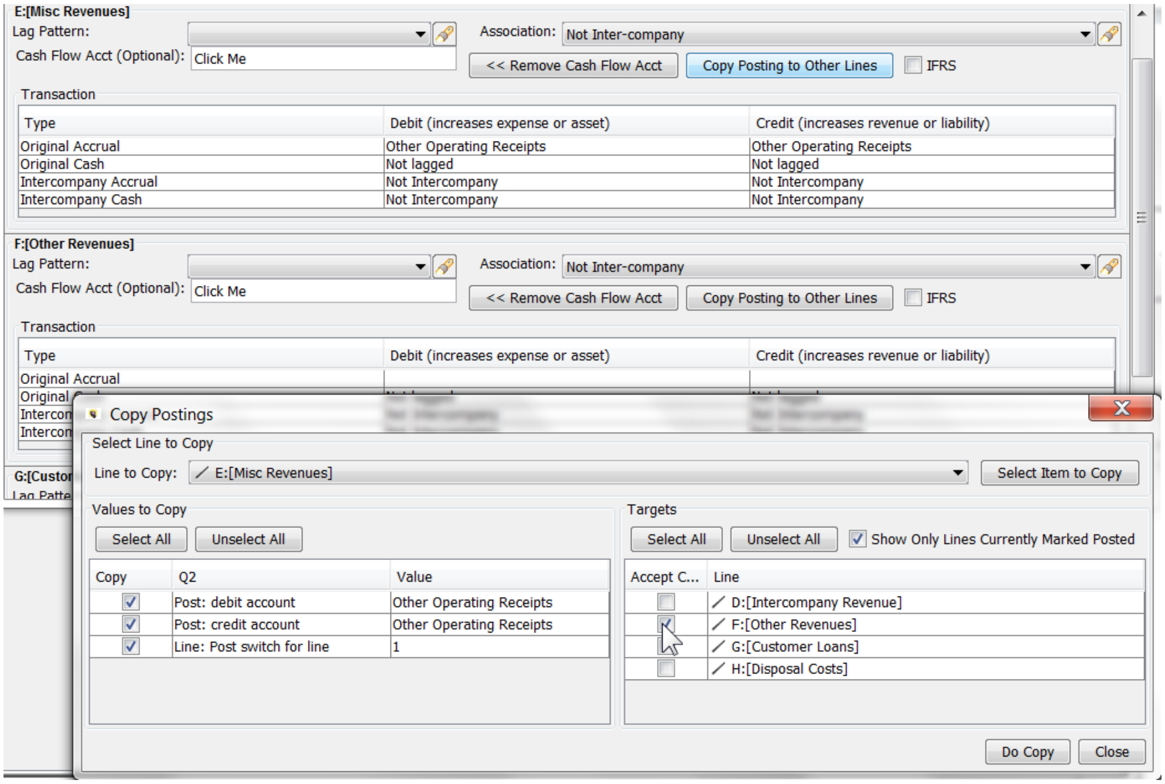
Intercompany

To tag a posting to be posted as intercompany, select an Intercompany relationship from the drop-down. This will enable the Intercompany lines for accounts to be selected. Select the appropriate accounts to use on the other side of the transaction.



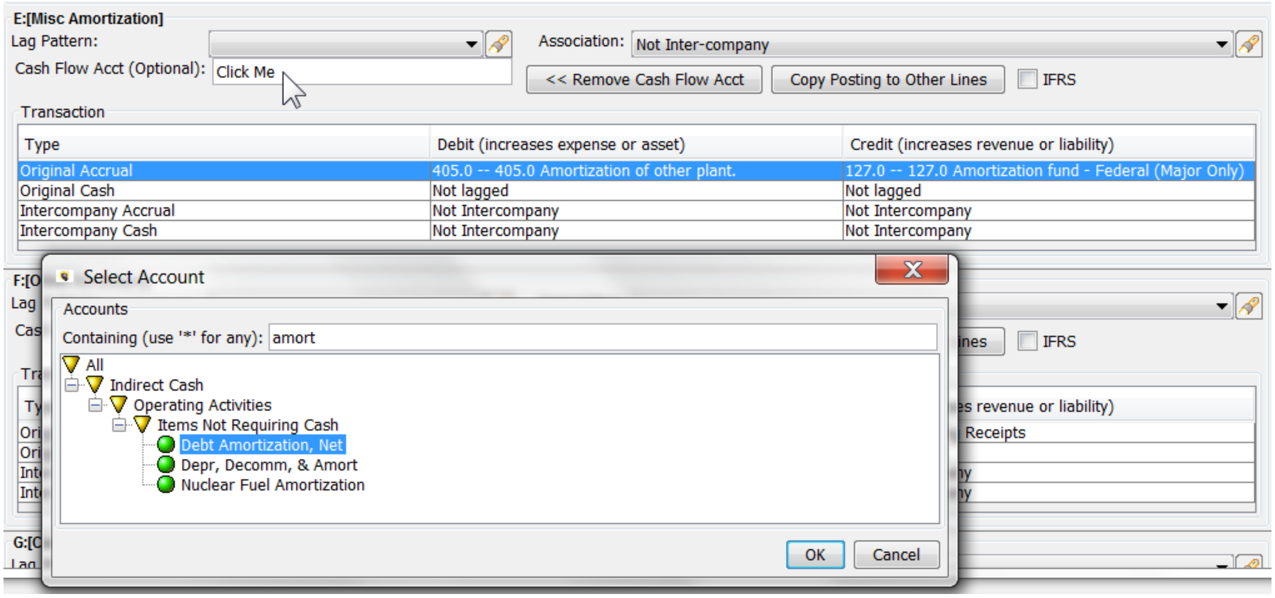
Copy Posting to Other Lines

Postings can be copied from one line to another. Select the line to be posted, and hit the Copy Posting to Other Lines button. This will bring up a dialog that allows the user to select another line (or lines) tagged to post, as well as which posting components to copy (the default is to copy all). Upon hitting Copy Posting, the postings tagged will be copied to the other line(s). The dialog allows the user to filter to only lines currently tagged to post. Note that if the user selects a line not tagged, the Copy Posting can set the posting flag.



Cash Flow Account (optional)

The Cash Flow Account button allows the user to tag the specific transaction to be posted to an account on the Indirect Cash Flow ledger.

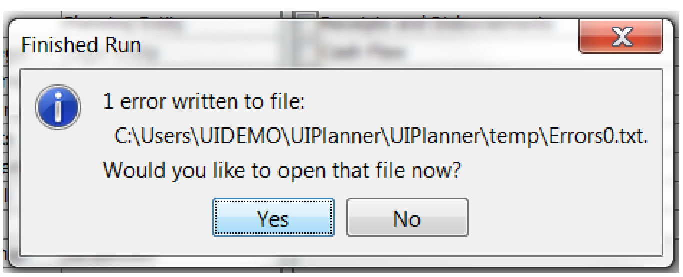


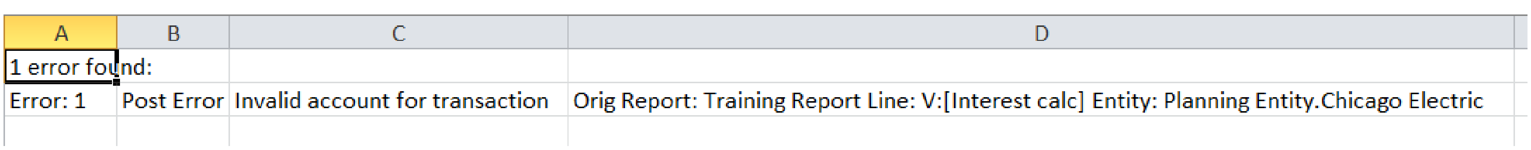
Financial Model Posting Errors

Below are the most common posting errors

Missing or incomplete posting

If no posting is specified, or an incomplete posting is configured, when the sequence is run, the following error message will be displayed. Note that the rest of the model will still run and produce results. Just the posting in question will not be processed.

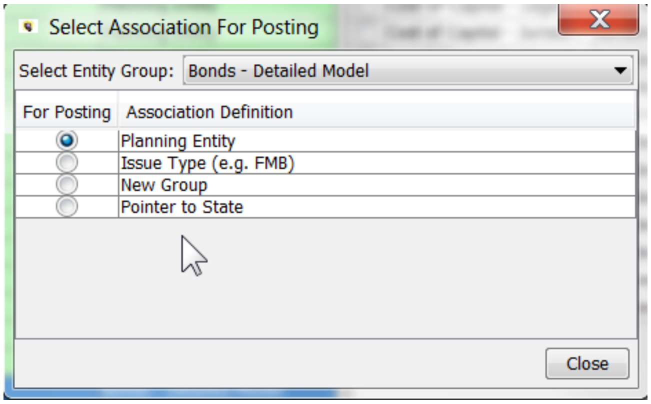




A	B	C	D
1 error found:			
Error: 1	Post Error	Invalid account for transaction	Orig Report: Training Report Line: V:[Interest calc] Entity: Planning Entity.Chicago Electric

No Posting Association

In order to post transactions to the Planning Ledger, each entity group needs to have an association to get to a Planning Entity. Below is the Posting Associations menu item.

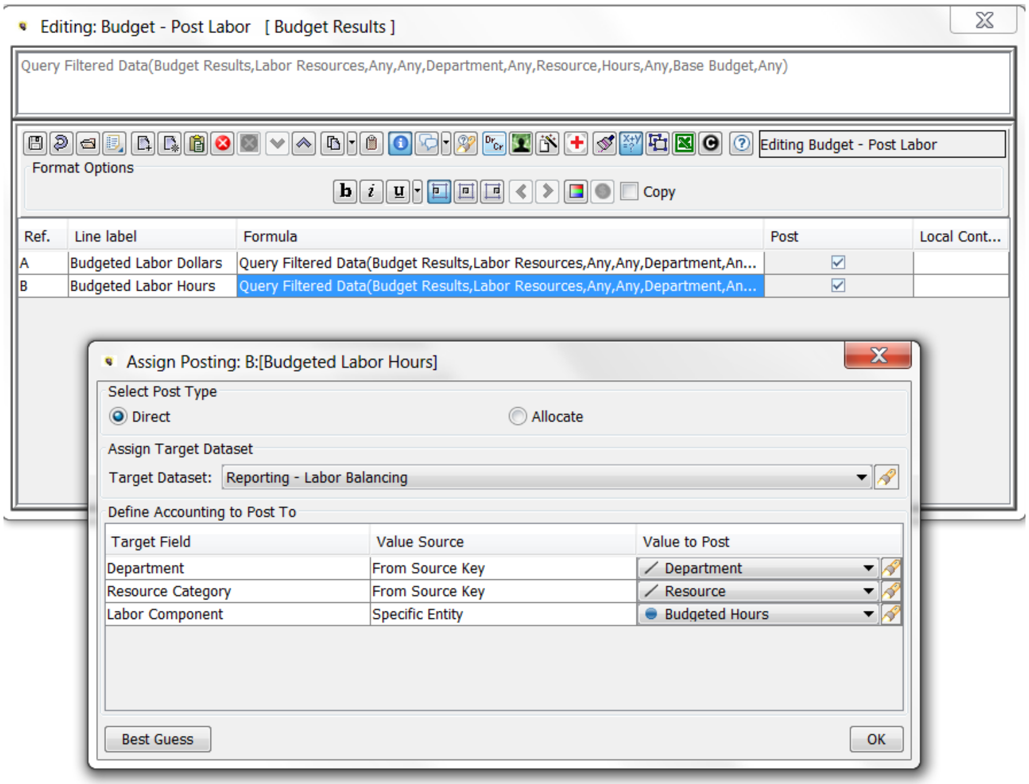


If this is not defined, and a user tries to post from a report, there will be an error message for each entity.

160 errors found:			
Error: 1	Post Error	No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: CP:[Total Interest Accrual] Entity: Bonds - Detailed Model.CHI 4.50% FMB due May 15, 2015
Error: 2	Post Error	No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: DB:[Amortization of Issue Cost] Entity: Bonds - Detailed Model.CHI 4.50% FMB due May 15, 2015
Error: 3	Post Error	No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: DF:[Interest Payment] Entity: Bonds - Detailed Model.CHI 4.50% FMB due May 15, 2015
Error: 4	Post Error	No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: CP:[Total Interest Accrual] Entity: Bonds - Detailed Model.CHI 5.5% FMB due Nov 1, 2035
Error: 5	Post Error	No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: DB:[Amortization of Issue Cost] Entity: Bonds - Detailed Model.CHI 5.5% FMB due Nov 1, 2035
Error: 6	Post Error	No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: DB:[Amortization of Issue Cost] Entity: Bonds - Detailed Model.CHI 5.5 pct Senior Notes due May 15, 2017

Posting - Multidimensional

In Multidimensional calculations, the user needs to first select a line that has been tagged to post using the Post checkbox. The multidimensional posting dialog shows the posting only for the selected line.



To define a posting, the user needs to

- Define the type of posting – define whether the posting will be direct or allocated
- Select a target dataset – choose a dataset to post to (from the current rule set)
- Define the posting – how each of the dimensions in the target dataset will be populated

Direct vs Allocate

These radio buttons allow the user to select from two different posting mechanisms.

Direct

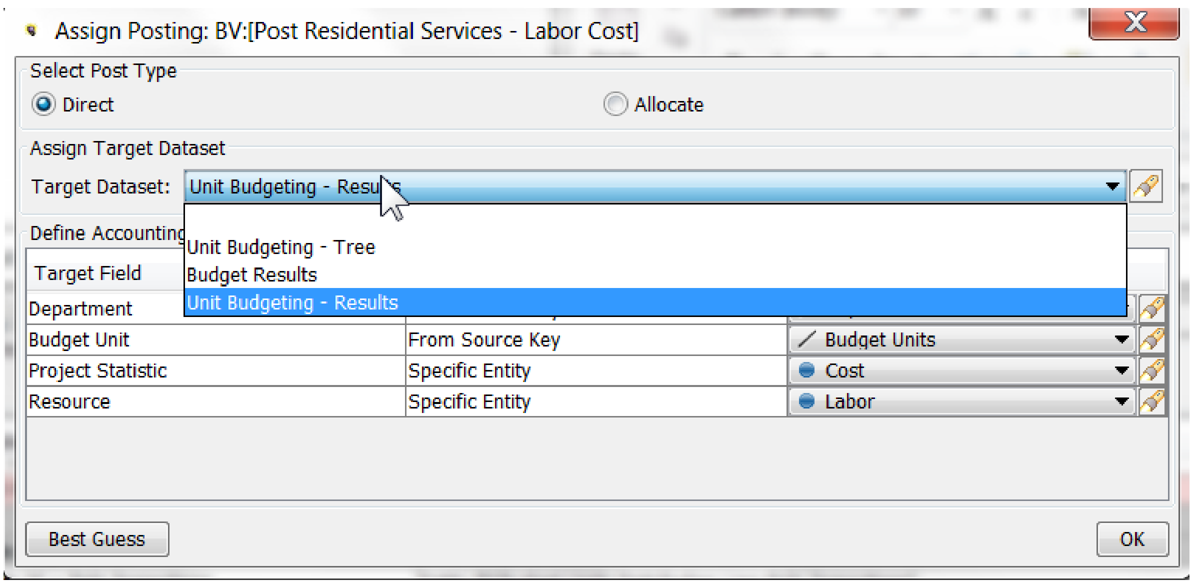
This method posts the current calculation results directly to the target dataset, for each dimension. The examples below are from Direct postings.

Allocate

This option allows the user to take the results from the calculation and post them to the target dataset after running through an allocation dataset, and thus explode out the final results using that allocation. See below under Allocate for more information.

Assign Target Dataset

Use the dropdown list to select a dataset to post to. Note that the droplist will show only Results of Calculations datasets from the Rule Set that the current calculation belongs to.

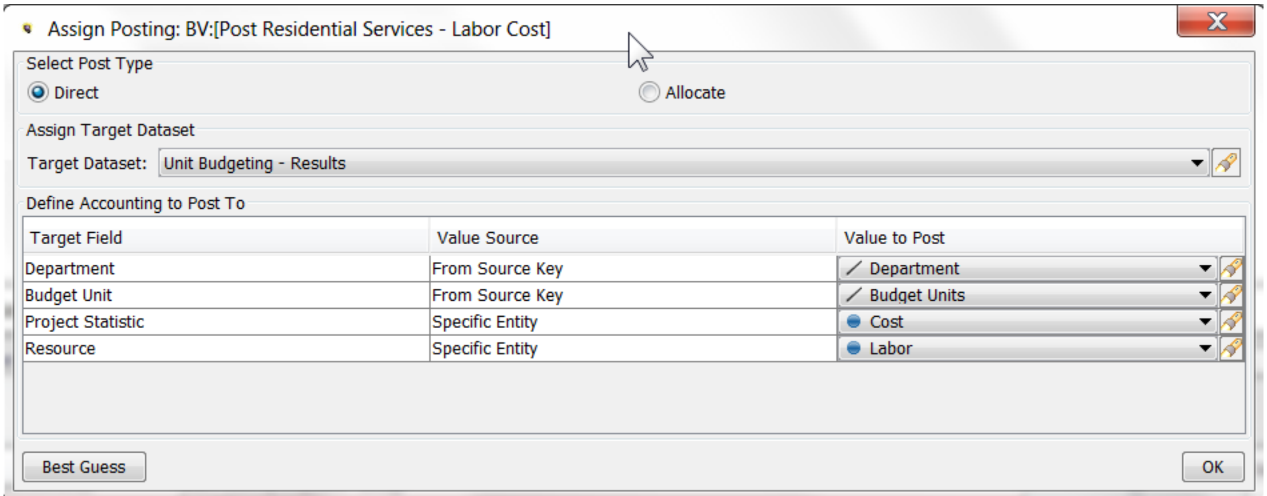


Define Accounting to Post to.

Once the target dataset has been selected, the Define Accounting grid will show the dimensions of that dataset. The user needs to define how each dimension will be populated from the calculation. There are three options:

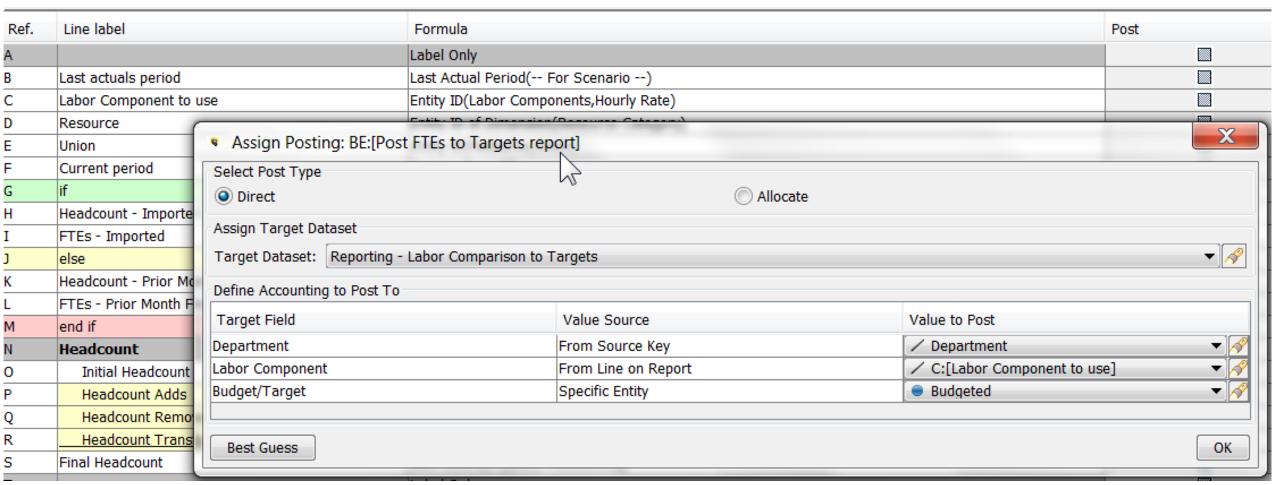
From Source Key

This option is used when the dimensions of the current report looping context are the same as the destination dataset.



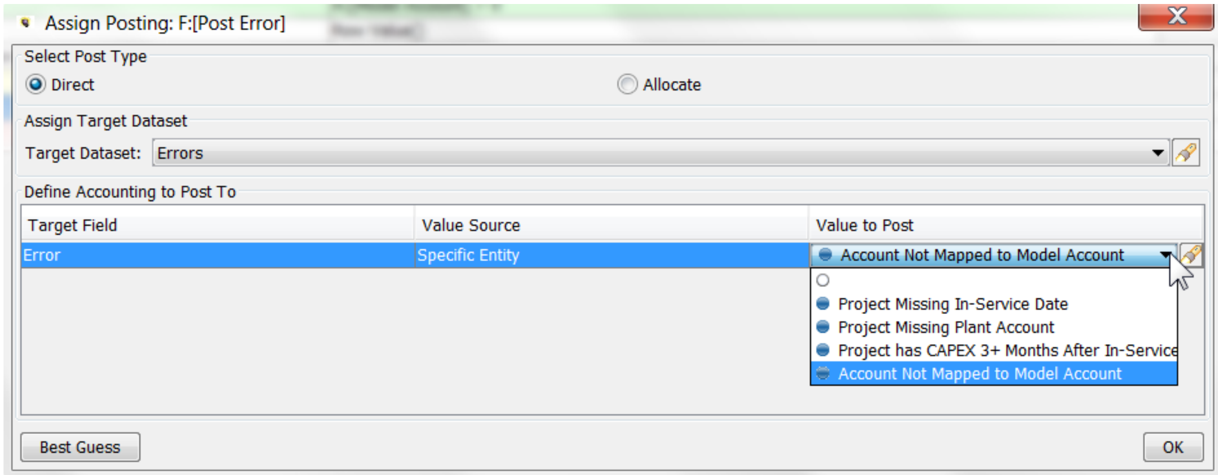
From Line

This option allows the user to specify that the dimension come from a line within the report. This is often used when the dimension has been derived from a function (e.g., Attribute of Dimension) or an If-Test, where the calculation has done an error trapping.



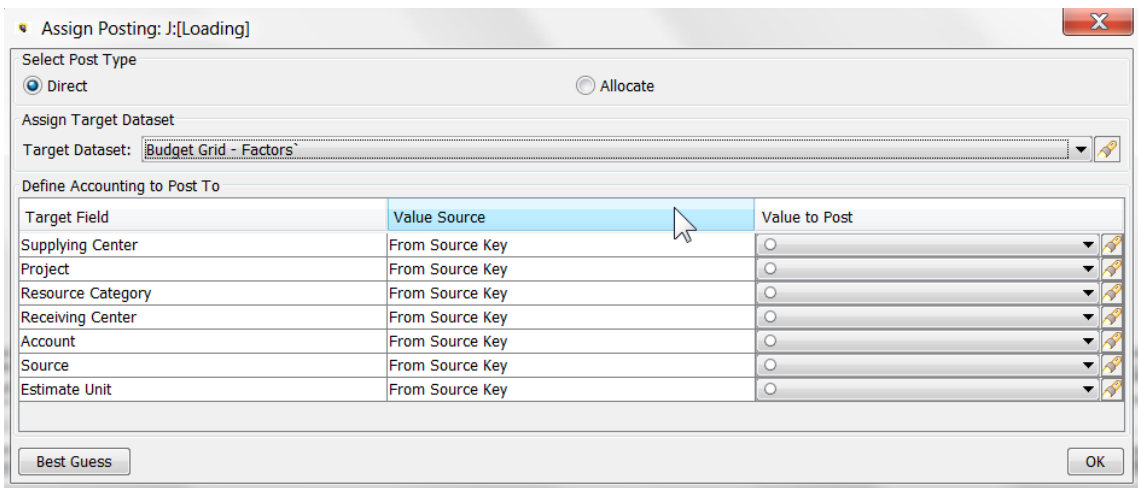
Specific Entity

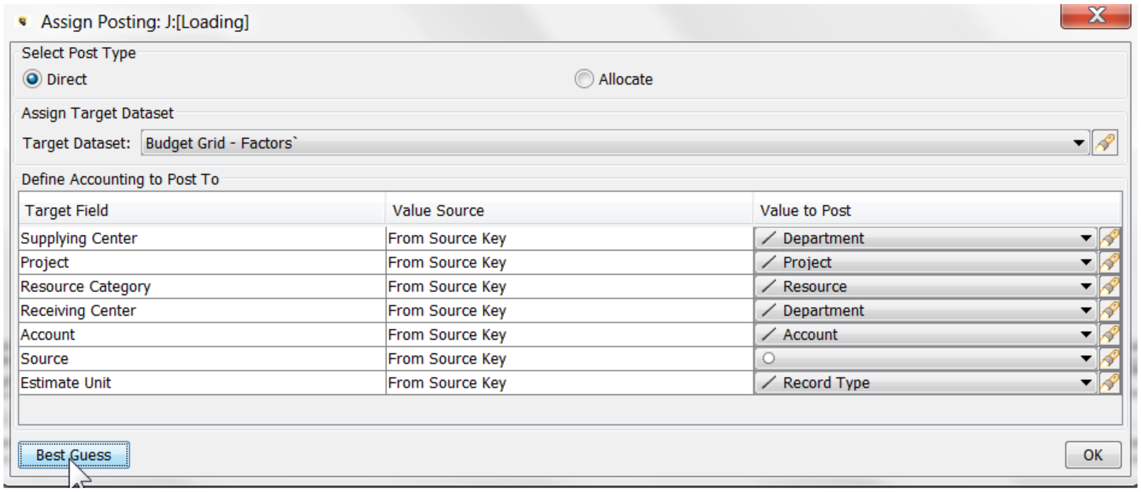
This allows the user to specify that a specific entity be posted. This is commonly used when posting error codes.



Best guess button

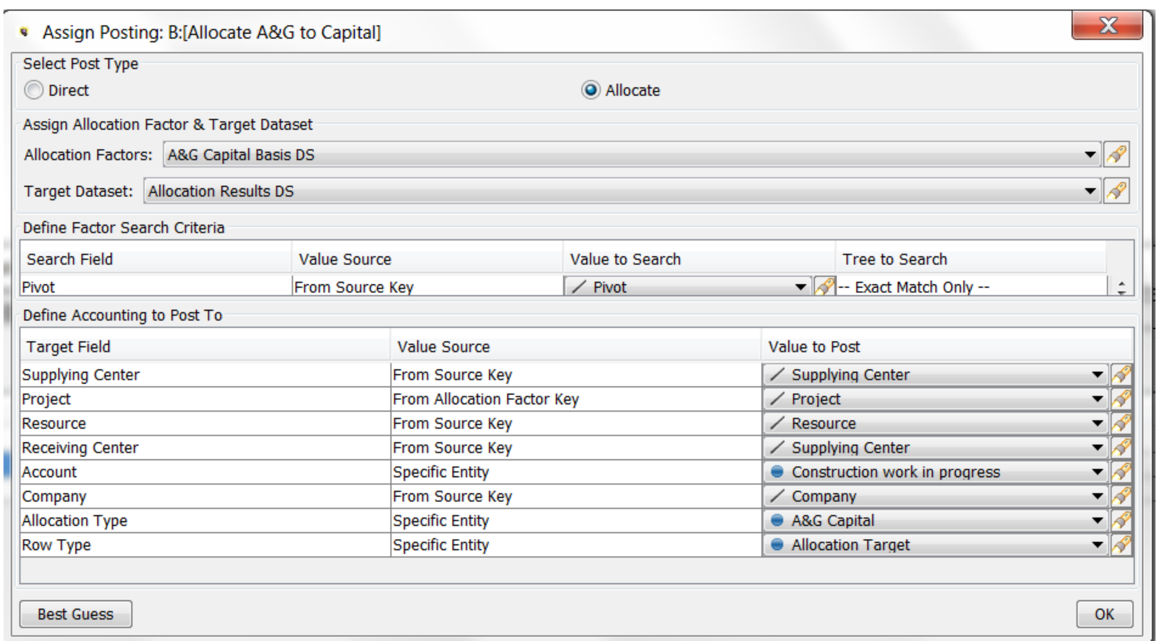
This button does a Best Guess at the posting. If the dimensions agree between the instruction set and the target, it will populate them as Source Keys. The user can then accept these or modify as needed. See below.





Allocate

The Allocate posting option allows the user to post to a Target Dataset but after running the results against an Allocation Factors dataset. This takes the base results and explodes them out using the allocation factors. User the drop-downs to select the Allocation Factors dataset and the Target Dataset. Both of these must be in the current rule set.

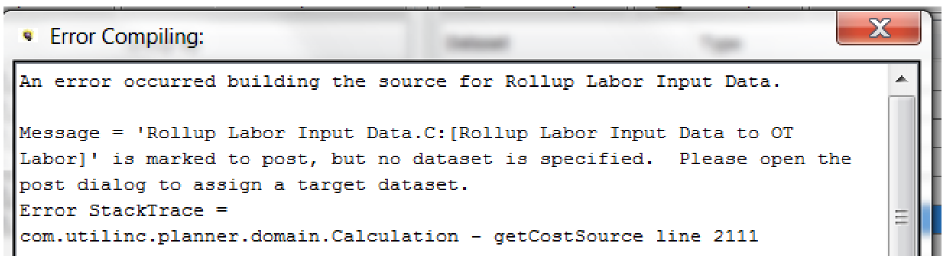


Case

In Multidimensional calculations, postings are by default stored in the Formula case. However, there is a Planner Property to allow clients with legacy postings in the Base Attribute case to continue to do so. Note that the Planner Property is stored in the Zero case, and thus crosses all scenarios.

Multidimensional Posting Errors

If a line is tagged to post but no posting is configured (e.g., no destination dataset), when the rule set containing that calculation is run, the following error message will be displayed.

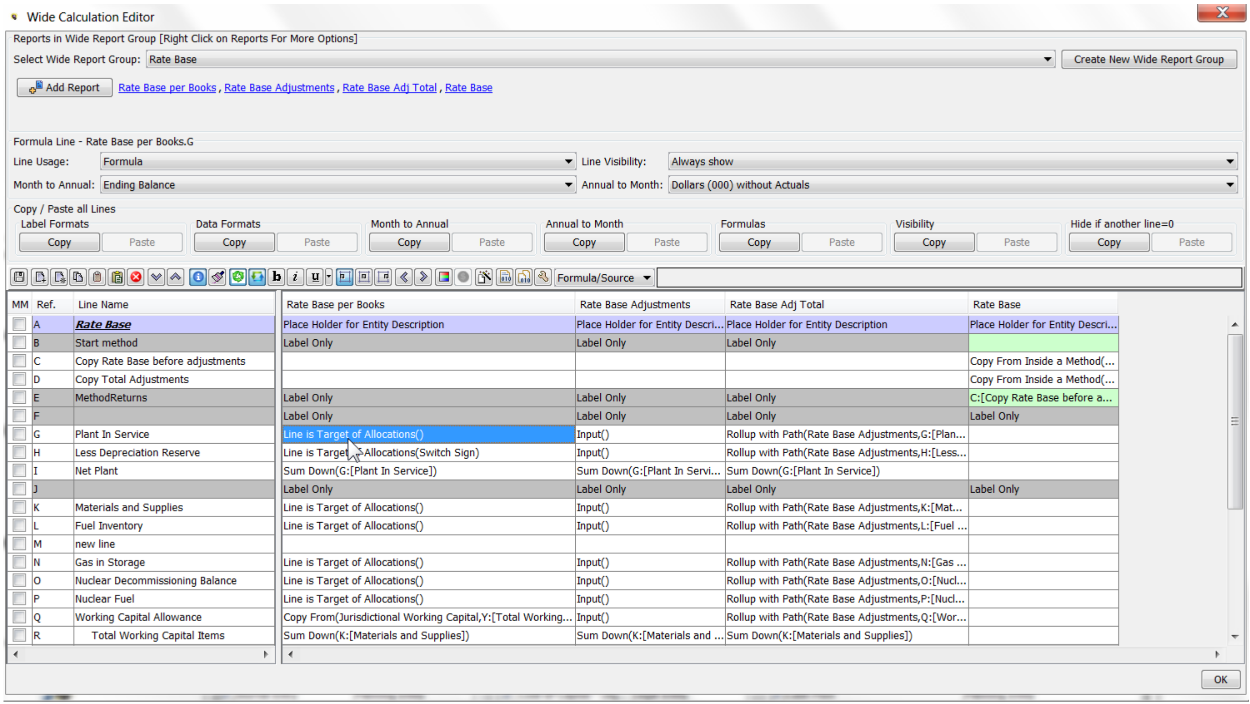


If a line is tagged to post but the posting is not fully configured, an error message will be displayed.

Wide Calculation Editor

As indicated above, the Calculation Editor has a different layout when editing Wide Reports in the Financial Model. It is a slightly modified view, to accommodate for the fact that it shows essentially n-reports side by side. Some of the main differences from the regular Calculation Editor are:

- There is just one formula column; the user toggles between Forecast and Actual formulas
- The user cannot add additional columns to the grid, and it cannot be edited in Excel
- It does not have the << and >> buttons to select previous reports
- It has an enhanced Copy/Paste All Lines capability, to take from one report and copy to another



Note that while the Wide Calculation Editor shows all of the reports in one view, users can still view or edit each of those reports individually, using the regular Calculation Editor. Users will need to use this mode in order to post any of the individual report lines, since the Wide Calculation Editor does not have the Posting icon. The reason is that it would be too difficult to display or edit postings across all n reports. See below, under Wide Reports in Regular Calculation Editor.

Screen Layout

The Wide Calculation Editor is divided into two main regions.

The top region is where the user selects the Wide Group to edit, or creates or modifies existing Wide Report groups. See below under Create or Edit Wide Report Groups.

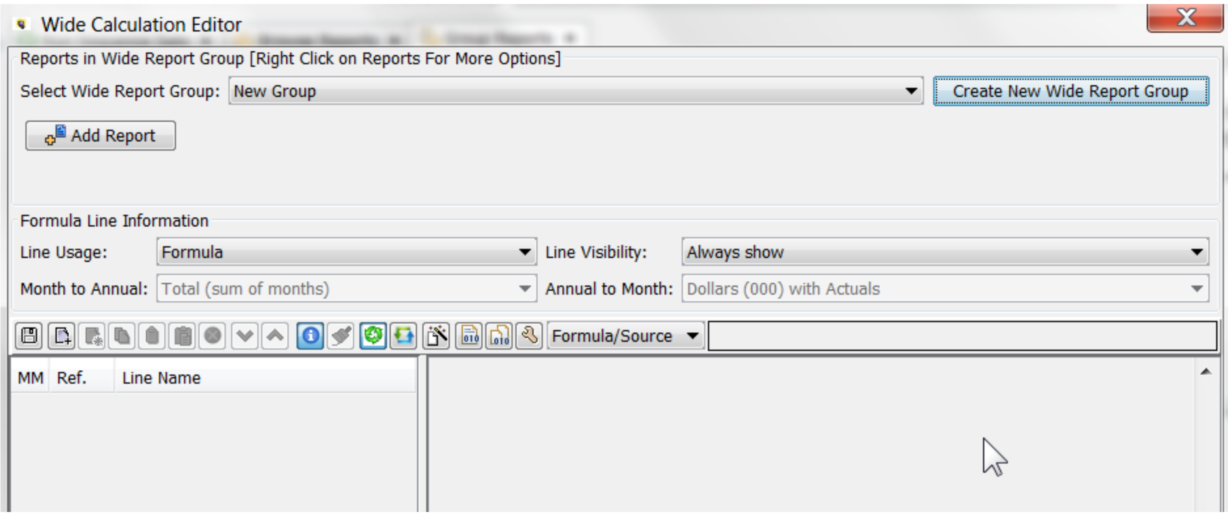
The bottom half of the screen is essentially the Calculation Editor for the selected Wide Report group. Note that each of the reports in the group show up as columns, with the line labels in the left hand column.

Create or Modify Wide Report Groups

Use the dropdown list to select the Wide Report group to edit (or view).

Create a new Wide Report Group

To create a new Wide Report group, select the Create New Wide Report Group button, and add it. The new Wide Report Group will show up in the Wide Calculation Editor blank, with no reports.



Then select the Add Report button, and choose the base report in the group. The new group will start out with the lines of this new report, and all reports subsequently added will inherit the lines of the group.